

NACOmatic

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GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the FAA Department of Transportation, National Aeronautical Navigation Services, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial-Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

CRITICAL information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE: <http://nfdc.faa.gov/portal/airportchanges.do>

FAA, Aeronautical Information Services, ATO-R, Rm. 626
800 Independence Ave., SW
Washington, DC 20591
Telephone 1-866-295-8236
Fax 202-267-5322
Email 9-ATOR-HQ-AIS-AIRPORTCHANGES@FAA.GOV

NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the "cut-off" dates listed below to assure publication on the desired effective date.

Effective Date	Airport Information	Airspace Information*
	Cut-off date	Cut-off date
23 Sep 10	11 Aug 10	22 Jul 10
18 Nov 10	6 Oct 10	16 Sep 10
13 Jan 11	1 Dec 10	11 Nov 10
10 Mar 11	26 Jan 11	6 Jan 11
5 May 11	23 Mar 11	3 Mar 11
30 Jun 11	18 May 11	28 Apr 11

*Including changes to preferred routes and graphic depictions on charts.

FOR CHARTING ERRORS CONTACT:

FAA, National Aeronautical Navigation Services
SSMC-4 Sta. #4435
1305 East West Highway
Silver Spring, MD 20910-3281
Telephone 1-800-626-3677
Email 9-AMC-Aerochart@faa.gov

Frequently asked questions (FAQs) are answered on our website at <http://aeronav.faa.gov>.

See the FAQs prior to contact via toll free number.

FOR PROCUREMENT CONTACT:

FAA, National Aeronautical Navigation Services
REDIS/Distribution Team
10201 Good Luck Road
Glenn Dale, MD 20769-9700
Online at <http://aeronav.faa.gov>
Email 9-AMC-Chartsales@faa.gov
Telephone 1-800-638-8972
Fax 301-436-6829
or any authorized chart agent.

New or Changed Information—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.

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GENERAL INFORMATION**ABBREVIATIONS**

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example—"req" may mean "request", "requesting", "requested", or "requests").

AAF	Army Air Field	byd	beyond
AB	Airbase	C	Commercial Circuit (Telephone)
abv	above	CGAF	Coast Guard Air Facility
ACC	Air Combat Command; Area Control Center	CGAS	Coast Guard Air Station
acft	aircraft	CIV	Civil
ADCC	Air Defense Control Center	cld	closed
AER	approach end rwy	CONUS	Continental United States
AFB	Air Force Base	CSTMS	Customs
AFHP	Air Force Heliport	ctc	contact
afld	airfield	ctl	control
AFOD	US Army Flight Operations Detachment	dalgt	daylight
AFRC	Armed Forces Reserve Center/Air Force Reserve Command	Dec	December
AFSS	Automated Flight Service Station	DIAP	DoD Instrument Approach Procedure
AG	Agriculture	DoD	Department of Defense
A-GEAR	Arresting Gear	DSN	Defense Switching Network (Telephone)
AGL	above ground level	dsplcd	displaced
AHP	Army heliport	durn	duration
ALS	Approach Light System	eff	effective
alt	altitude	emerg	emergency
AMC	Air Mobility Command	EOR	End of Runway
ANGS	Air National Guard Station	ETA	Estimated Time of Arrival
apch	approach	ETD	Estimated Time of Departure
Apr	April	exc	except
APU	Auxiliary Power Unit	extd	extend
ARB	Air Reserve Base	FBO	fixed-base operator
apt	airport	Feb	February
ARS	Air Reserve Station	fld	field
AS	Air Station	FLIP	Flight Information Publication
ASDE-X	Airport Surface Detection Equipment—Model X	flt	flight
		flw	follow
ASU	Aircraft Starting Unit	Fri	Friday
ATC	Air Traffic Control	FSS	Flight Service Station
ATCT	Airport Traffic Control Tower	GA	glide angle
Aug	August	GCA	Ground Controlled Approach
AUW	All Up Weight (gross weight)	GS	glide slope
avbl	available	haz	hazard
bcn	beacon	HQ	Headquarters
blo	below		

CONTINUED ON NEXT PAGE

GENERAL INFORMATION**CONTINUED FROM PRECEDING PAGE**

hr	hour	npi	non precision instrument
IAP	Instrument Approach Procedure	NS ABTMT	Noise Abatement
ICAO	International Civil Aviation Organization	NSTD	nonstandard
IFR	Instrument Flight Rules	ntc	notice
ILS	Instrument Landing System	obsn	observation
IM	Inner Marker	Oct	October
IMG	Immigration	OLF	Outlying Field
incr	increase	opr	operate, operator, operational
indef	indefinite	ops	operations
ints	intensity	OTS	out of service
invof	in the vicinity of	ovrn	overrun
IMC	Instrument Meteorological Conditions	PAEW	personnel and equipment working
Jan	January	pat	pattern
JASU	Jet Aircraft Starting Unit	p-line	power line
JOAP	Joint Oil Analysis Program	PMSV	Pilot-to-Metro Service
JOSAC	Joint Operational Support Airlift Center	POL	Petrol, Oils and Lubricants
JRB	Joint Reserve Base	PPR	prior permission required
Jul	July	PRM	Precision Runway Monitoring
Jun	June	PTD	Pilot to Dispatcher
Kt	Knots	RAMCC	Regional Air Movement Control Center
LAA	Local Airport Advisory	req	request
LAHSO	Land and Hold Short Operations	rgt tfc	right traffic
lbs	pounds	RON	Remain Overnight
ldg	landing	rqr	require
lgtd	lighted	rstd	restricted
lgts	lights	RSRS	reduced same runway separation
LMM	Compass locator at Middle Marker ILS	rwv	runway
LOC	Localizer	Sat	Saturday
LOM	Compass locator at Outer Marker ILS	SELF	Strategic Expeditionary Landing Field
ltd	limited	Sep	September
MACC	Military Area Control Center	SFA	Single Frequency Approach
Mar	March	sfc	surface
MCAF	Marine Corps Air Facility	SFRA	Special Flight Rules Area
MCALF	Marine Corps Auxiliary Landing Field	SOAP	Spectrometric Oil Analysis Program
MCAS	Marine Corps Air Station	SOF	Supervisor of Flying
MCB	Marine Corps Base	SPB	Seaplane Base
med	medium	SR	sunrise
METRO	Pilot-to-Metro voice call	SS	sunset
Mil	military	std	standard
min	minute	Sun	Sunday
MLS	Microwave Landing System	svc	service
MM	Middle Marker of ILS	tfc	traffic
Mon	Monday	thld	threshold
MP	Maintenance Period	Thu	Thursday
MSL	mean sea level	tkf	take-off
MSAW	minimum safe altitude warning	tmpry	temporary
NAAS	Naval Auxiliary Air Station	tran	transient
NADC	Naval Air Development Center	Tue	Tuesday
NADEP	Naval Air Depot	twr	tower
NAEC	Naval Air Engineering Center	twy	taxiway
NAES	Naval Air Engineering Station	UC	Under Construction
NAF	Naval Air Facility	USA	United States Army
NALCO	Naval Air Logistics Control Office	USAF	United States Air Force
NALO	Navy Air Logistics Office	USCG	United States Coast Guard
NALF	Naval Auxiliary Landing Field	USN	United States Navy
NAS	Naval Air Station	V	Defense Switching Network (telephone, formerly AUTOVON)
NAWC	Naval Air Warfare Center	VFR	Visual Flight Rules
NAWS	Naval Air Weapons Station	VIP	Very Important Person
ngt	night	VMC	Visual Meteorological Conditions
NOLF	Naval Outlying Field	Wed	Wednesday
Nov	November	wx	weather

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SKETCH LEGEND

RUNWAYS/LANDING AREAS

Hard Surfaced	
Metal Surface	
Sod, Gravel, etc.	
Light Plane,	
Ski Landing Area or Water	
Under Construction	
Closed	
Helicopter Landings Area	
Displaced Threshold	
Taxiway, Apron and Stopways	

RADIO AIDS TO NAVIGATION

VORTAC		VOR	
VOR/DME		NDB	
TACAN		NDB/DME	

MISCELLANEOUS AERONAUTICAL FEATURES

Airport Beacon	
Wind Cone	
Landing Tee	
Tetrahedron	
Control Tower	

MISCELLANEOUS BASE AND CULTURAL FEATURES

Buildings	
Power Lines	
Fence	
Towers	
Tanks	
Oil Well	
Smoke Stack	
Obstruction	
Controlling Obstruction	
Trees	
Populated Places	
Cuts and Fills	Cut Fill
Cliffs and Depressions	
Ditch	
Hill	

APPROACH LIGHTING SYSTEMS

A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g. Negative symbology, e.g.,
 indicates Pilot Controlled Lighting (PCL).

Runway Centerline Lighting	
Approach Lighting System ALSF-2	
Approach Lighting System ALSF-1	
Short Approach Lighting System SALS/SALSF	
Simplified Short Approach Lighting System (SSALR) with RAIL	
Medium Intensity Approach Lighting System (MALS and MALSF)/(SSALS and SSALF)	
Medium Intensity Approach Lighting System (MALS) and RAIL	
Omnidirectional Approach Lighting System (ODALS)	
Navy Parallel Row and Cross Bar	
Air Force Overrun	
Visual Approach Slope Indicator with Standard Threshold Clearance provided	
Pulsating Visual Approach Slope Indicator (PVASI)	
Visual Approach Slope Indicator with a threshold crossing height to accommodate long bodied or jumbo aircraft	
Tri-color Visual Approach Slope Indicator (TRCV)	
Approach Path Alignment Panel (APAP)	
Precision Approach Path Indicator (PAPI)	

DIRECTORY LEGEND**LEGEND**

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Navaids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

(1) CITY/AIRPORT NAME

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

(2) ALTERNATE NAME

Alternate names, if any, will be shown in parentheses.

(3) LOCATION IDENTIFIER

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter "O".

(4) OPERATING AGENCY

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no military tenant.

A	US Army	MC	Marine Corps
AFRC	Air Force Reserve Command	N	Navy
AF	US Air Force	NAF	Naval Air Facility
ANG	Air National Guard	NAS	Naval Air Station
AR	US Army Reserve	NASA	National Air and Space Administration
ARNG	US Army National Guard	P	US Civil Airport Wherein Permit Covers
CG	US Coast Guard		Use by Transient Military Aircraft
CIV/MIL	Joint Use Civil/Military	PVT	Private Use Only (Closed to the Public)
DND	Department of National Defense Canada		

(5) AIRPORT LOCATION

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

(6) TIME CONVERSION

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as "Z" time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time (UTC-5(-4DT)). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (-4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15–Aug 31 0630–1700Z, Sep 1–Apr 14 0600–1700Z.

(7) GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

(8) CHARTS

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER. IFR Gulf of Mexico West and IFR Gulf of Mexico Central will be depicted as GOMW and GOMC.

(9) INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAMS

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5-4-5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

(10) AIRPORT SKETCH

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

(11) ELEVATION

The highest point of an airport's usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as "00". When elevation is below sea level a minus “-” sign will precede the figure.

(12) ROTATING LIGHT BEACON

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

(13) SERVICING—CIVIL

- | | | | |
|-----|--|-----|--|
| S1: | Minor airframe repairs. | S5: | Major airframe repairs. |
| S2: | Minor airframe and minor powerplant repairs. | S6: | Minor airframe and major powerplant repairs. |
| S3: | Major airframe and minor powerplant repairs. | S7: | Major powerplant repairs. |
| S4: | Major airframe and major powerplant repairs. | S8: | Minor powerplant repairs. |

(14) FUEL

CODE	FUEL
80	Grade 80 gasoline (Red)
100	Grade 100 gasoline (Green)
100LL	100LL gasoline (low lead) (Blue)
115	Grade 115 gasoline (115/145 military specification) (Purple)
A	Jet A, Kerosene, without FS-II*, FP** minus 40° C.
A+	Jet A, Kerosene, with FS-II*, FP** minus 40°C.
A1	Jet A-1, Kerosene, without FS-II*, FP** minus 47°C.
A1+	Jet A-1, Kerosene with FS-II*, FP** minus 47°C.
B	Jet B, Wide-cut, turbine fuel without FS-II*, FP** minus 50° C.

*(Fuel System Icing Inhibitor)

**(Freeze Point)

NOTE: Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as "MOGAS", however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

(15) OXYGEN—CIVIL

- | | | | |
|------|---------------|------|-----------------------------------|
| OX 1 | High Pressure | OX 3 | High Pressure—Replacement Bottles |
| OX 2 | Low Pressure | OX 4 | Low Pressure—Replacement Bottles |

(16) TRAFFIC PATTERN ALTITUDE

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as "TPA—See Remarks" and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

DIRECTORY LEGEND**(17) AIRPORT OF ENTRY, LANDING RIGHTS, AND CUSTOMS USER FEE AIRPORTS**

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)	407-975-1740
Southeast Sector (Atlantic States—DC, WV, VA to FL)	407-975-1780
Central Sector (Interior of the US, including Gulf states—MS, AL, LA)	407-975-1760
Southwest East Sector (OK and eastern TX)	407-975-1840
Southwest West Sector (Western TX, NM and AZ)	407-975-1820
Pacific Sector (WA, OR, CA, HI and AK)	407-975-1800

(18) CERTIFIED AIRPORT (14 CFR PART 139)

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

**14 CFR PART 139 CERTIFIED AIRPORTS
AIRPORT CLASSIFICATIONS**

Type of Air Carrier Operation	Class I	Class II	Class III	Class IV
Scheduled Air Carrier Aircraft with 31 or more passenger seats	X			
Unscheduled Air Carrier Aircraft with 31 or more passengers seats	X	X		
Scheduled Air Carrier Aircraft with 10 to 30 passenger seats	X	X	X	

14 CFR—PART 139 CERTIFIED AIRPORTS

INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS

Airport Index	Required No. Vehicles	Aircraft Length	Scheduled Departures	Agent + Water for Foam
A	1	<90'	≥1	500#DC or HALON 1211 or 450#DC + 100 gal H ₂ O
B	1 or 2	≥90', <126' ----- ≥126', <159'	≥5 ----- <5	Index A + 1500 gal H ₂ O
C	2 or 3	≥126', <159' ----- ≥159', <200'	≥5 ----- <5	Index A + 3000 gal H ₂ O
D	3	≥159', <200' ----- >200'	----- <5	Index A + 4000 gal H ₂ O
E	3	≥200'	≥5	Index A + 6000 gal H ₂ O

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H₂O—Water; DC—Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

(19) NOTAM SERVICE

All public use landing areas are provided NOTAM "D" (distant dissemination) and NOTAM "L" (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. "NOTAM FILE IAD". See AIM, Basic Flight Information and

DIRECTORY LEGEND

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ATC Procedures for detailed description of NOTAM's. Current NOTAMs are available from Flight Service Stations at 1-800-WX-BRIEF. Real time Military NOTAMs are available using the DoD Internet NOTAM Distribution System (DINS) www.notams.jcs.mil.

(20) FAA INSPECTION

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

(21) RUNWAY DATA

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

RUNWAY DESIGNATION

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as Ultralight or assault strips. Assault strips are shown by magnetic bearing.

RUNWAY DIMENSIONS

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

RUNWAY SURFACE AND LENGTH

Runway lengths prefixed by the letter "H" indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt-concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

(AFSC)—Aggregate friction seal coat	(GRVL)—Gravel, or cinders	(PSP)—Pierced steel plank
(ASPH)—Asphalt	(MATS)—Pierced steel planking, landing mats, membranes	(RFSC)—Rubberized friction seal coat
(CONC)—Concrete	(PEM)—Part concrete, part asphalt	(TURF)—Turf
(DIRT)—Dirt	(PFC)—Porous friction courses	(TRTD)—Treated
(GRVD)—Grooved		(WC)—Wire combed

RUNWAY WEIGHT BEARING CAPACITY

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

CURRENT	NEW	NEW DESCRIPTION
S	S	Single wheel type landing gear (DC3), (C47), (F15), etc.
D	D	Dual wheel type landing gear (BE1900), (B737), (A319), etc.
T	D	Dual wheel type landing gear (P3, C9).
ST	2S	Two single wheels in tandem type landing gear (C130).
TRT	2T	Two triple wheels in tandem type landing gear (C17), etc.
DT	2D	Two dual wheels in tandem type landing gear (B707), etc.
TT	2D	Two dual wheels in tandem type landing gear (B757, KC135).
SBTT	2D/D1	Two dual wheels in tandem/dual wheel body gear type landing gear (KC10).
None	2D/2D1	Two dual wheels in tandem/two dual wheels in tandem body gear type landing gear (A340-600).
DDT	2D/2D2	Two dual wheels in tandem/two dual wheels in double tandem body gear type landing gear (B747, E4).
TTT	3D	Three dual wheels in tandem type landing gear (B777), etc.
TT	D2	Dual wheel gear two struts per side main gear type landing gear (B52).
TDT	C5	Complex dual wheel and quadruple wheel combination landing gear (C5).

- AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.
- SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).
- PSI—Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12,500 pounds. The Pavement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g. PCN 80 R/B/W/T). Details of the coded format are as follows:

- (1) The PCN NUMBER—The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.
- (2) The type of pavement:
R — Rigid
F — Flexible
- (3) The pavement subgrade category:
A — High
B — Medium
C — Low
D — Ultra-low
- (4) The maximum tire pressure authorized for the pavement:
W — High, no limit
X — Medium, limited to 217 psi
Y — Low, limited to 145 psi
Z — Very low, limited to 73 psi
- (5) Pavement evaluation method:
T — Technical evaluation
U — By experience of aircraft using the pavement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots, lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD—Light system fails to meet FAA standards.

LIRL—Low Intensity Runway Lights.

MIRL—Medium Intensity Runway Lights.

HIRL—High Intensity Runway Lights.

RAIL—Runway Alignment Indicator Lights.

REIL—Runway End Identifier Lights.

CL—Centerline Lights.

TDZL—Touchdown Zone Lights.

ODALS—Omni Directional Approach Lighting System.

AF OVRN—Air Force Overrun 1000' Standard

Approach Lighting System.

LDIN—Lead-In Lighting System.

MALS—Medium Intensity Approach Lighting System.

MALSF—Medium Intensity Approach Lighting System with Sequenced Flashing Lights.

MALSR—Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.

SALS—Short Approach Lighting System.

SALSF—Short Approach Lighting System with Sequenced Flashing Lights.

SSALS—Simplified Short Approach Lighting System.

SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.

SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.

ALSAF—High Intensity Approach Lighting System with Sequenced Flashing Lights.

ALSF1—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.

ALSF2—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category II, Configuration.

SF—Sequenced Flashing Lights.

OLS—Optical Landing System.

WAVE-OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the "Remarks" portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

VISUAL GLIDESLOPE INDICATORS

APAP—A system of panels, which may or may not be lighted, used for alignment of approach path.

PNIL APAP on left side of runway

PNIR APAP on right side of runway

PAPI—Precision Approach Path Indicator

P2L 2-identical light units placed on left side of runway

P4L 4-identical light units placed on left side of runway

P2R 2-identical light units placed on right side of runway

P4R 4-identical light units placed on right side of runway

PVASI—Pulsating/steady burning visual approach slope indicator, normally a single light unit projecting two colors.

PSIL PVASI on left side of runway

PSIR PVASI on right side of runway

SAVASI—Simplified Abbreviated Visual Approach Slope Indicator

S2L 2-box SAVASI on left side of runway

S2R 2-box SAVASI on right side of runway

TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.

TRIL TRCV on left side of runway

TRIR TRCV on right side of runway

VASI—Visual Approach Slope Indicator

V2L 2-box VASI on left side of runway

V6L 6-box VASI on left side of runway

V2R 2-box VASI on right side of runway

V6R 6-box VASI on right side of runway

V4L 4-box VASI on left side of runway

V12 12-box VASI on both sides of runway

V4R 4-box VASI on right side of runway

V16 16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., -GA 3.5° TCH 37'.

PILOT CONTROL OF AIRPORT LIGHTING

Key MikeFunction

7 times within 5 seconds

Highest intensity available

5 times within 5 seconds

Medium or lower intensity
(Lower REIL or REIL-Off)

3 times within 5 seconds

Lowest intensity available
(Lower REIL or REIL-Off)

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALS Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, "Basic Flight Information and ATC Procedures," for detailed description of pilot control of airport lighting.

RUNWAY SLOPE

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. "Rgt tfc"—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take-off.

TODA—Take-off Distance Available. The length of the take-off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take-off run available plus the length of the stopway, if provided.

LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

(22) ARRESTING GEAR/SYSTEMS

Arresting gear is shown as it is located on the runway. The a-gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A-Gear which has a bi-direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A-Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

DIRECTORY LEGEND

BI-DIRECTIONAL CABLE (B)

<u>TYPE</u>	<u>DESCRIPTION</u>
BAK-9	Rotary friction brake.
BAK-12A	Standard BAK-12 with 950 foot run out, 1-inch cable and 40,000 pound weight setting. Rotary friction brake.
BAK-12B	Extended BAK-12 with 1200 foot run, 1½ inch Cable and 50,000 pounds weight setting. Rotary friction brake.
E28	Rotary Hydraulic (Water Brake).
M21	Rotary Hydraulic (Water Brake) Mobile.

The following device is used in conjunction with some aircraft arresting systems:

BAK-14	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to five seconds to fully raise the cable.)
H	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to one and one-half seconds to fully raise the cable.)

UNI-DIRECTIONAL CABLE

<u>TYPE</u>	<u>DESCRIPTION</u>
MB60	Textile brake—an emergency one-time use, modular braking system employing the tearing of specially woven textile straps to absorb the kinetic energy.
E5/E5-1/E5-3	Chain Type. At USN/USMC stations E-5 A-GEAR systems are rated, e.g., E-5 RATING-13R-1100 HW (DRY), 31L/R-1200 STD (WET). This rating is a function of the A-GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under Military Service.

FOREIGN CABLE

<u>TYPE</u>	<u>DESCRIPTION</u>	<u>US EQUIVALENT</u>
44B-3H	Rotary Hydraulic (Water Brake)	
CHAG	Chain	E-5

UNI-DIRECTIONAL BARRIER

<u>TYPE</u>	<u>DESCRIPTION</u>
MA-1A	Web barrier between stanchions attached to a chain energy absorber.
BAK-15	Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction, chain). Designed for wing engagement.

NOTE: Landing short of the runway threshold on a runway with a BAK-15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

OTHER

<u>TYPE</u>	<u>DESCRIPTION</u>
EMAS	Engineered Material Arresting System, located beyond the departure end of the runway, consisting of high energy absorbing materials which will crush under the weight of an aircraft.

(23) MILITARY SERVICE

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

(24) JET AIRCRAFT STARTING UNITS (JASU)

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non-availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35-1-7.)

ELECTRICAL STARTING UNITS:

A/M32A-86	AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire DC: 28v, 1500 amp, 72 kw (with TR pack)
MC-1A	AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire DC: 28v, 500 amp, 14 kw
MD-3	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD-3A	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD-3M	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 500 amp, 15 kw

DIRECTORY LEGEND

MD-4

AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, "WYE" neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, "DELTA" 3 wire, 120v, 400 cycle, 1 phase, 62.5 kva, 0.8 pf, 520 amp, 2 wire

AIR STARTING UNITS

AM32-95	150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- 2 psia
AM32A-95	150 +/- 5 lb/min @ 49 +/- 2 psia (35 +/- 2 psig)
LASS	150 +/- 5 lb/min @ 49 +/- 2 psia
MA-1A	82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press
MC-1	15 cfm, 3500 psia
MC-1A	15 cfm, 3500 psia
MC-2A	15 cfm, 200 psia
MC-11	8,000 cu in cap, 4000 psig, 15 cfm

COMBINED AIR AND ELECTRICAL STARTING UNITS:

AGPU	AC: 115/200v, 400 cycle, 3 phase, 30 kw gen DC: 28v, 700 amp
	AIR: 60 lb/min @ 40 psig @ sea level
AM32A-60*	AIR: 120 +/- 4 lb/min (1644 +/- 55 cfm) at 49 +/- 2 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva
AM32A-60A	DC: 28v, 500 amp, 15 kw
	AIR: 150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire
	DC: 28v, 200 amp, 5.6 kw
AM32A-60B*	AIR: 130 lb/min, 50 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire DC: 28v, 200 amp, 5.6 kw

*NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available.

USN JASU

ELECTRICAL STARTING UNITS:

NC-8A/A1	DC: 500 amp constant, 750 amp intermittent, 28v; AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.
NC-10A/A1/B/C	DC: 750 amp constant, 1000 amp intermittent, 28v; AC: 90 kva, 115/200v, 3 phase, 400 Hz.

AIR STARTING UNITS:

GTC-85/GTE-85	120 lbs/min @ 45 psi.
MSU-200NAV/A/U47A-5	204 lbs/min @ 56 psia.
WELLS AIR START SYSTEM	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.

COMBINED AIR AND ELECTRICAL STARTING UNITS:

NCPP-105/RCPT	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC, 30 kva.
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JASU (ARMY)

59B2-1B	28v, 7.5 kw, 280 amp.
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OTHER JASU

ELECTRICAL STARTING UNITS (DND):

CE12	AC 115/200v, 140 kva, 400 Hz, 3 phase
CE13	AC 115/200v, 60 kva, 400 Hz, 3 phase
CE14	AC/DC 115/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp
CE15	DC 22-35v, 500 amp continuous 1100 amp intermittent
CE16	DC 22-35v, 500 amp continuous 1100 amp intermittent soft start

AIR STARTING UNITS (DND):

CA2	ASA 45.5 psig, 116.4 lb/min
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COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)

CEA1	AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp AIR 112.5 lb/min, 47 psig
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ELECTRICAL STARTING UNITS (OTHER)

C-26	28v 45kw 115-200v 15kw 380-800 Hz 1 phase 2 wire
C-26-B, C-26-C	28v 45kw: Split Bus: 115-200v 15kw 380-800 Hz 1 phase 2 wire
E3	DC 28v/10kw

AIR STARTING UNITS (OTHER):

A4	40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)
MA-1	150 Air HP, 115 lb/min 50 psia
MA-2	250 Air HP, 150 lb/min 75 psia

CARTRIDGE:

MXU-4A

USAFAF

DIRECTORY LEGEND

14

25 FUEL—MILITARY

Fuel available through US Military Base supply, DESC Into-Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into-Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into-Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into-Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into-Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at www.desc.dla.mil/Static/ProductsAndServices.asp; click on the Commercial Airports button.

See legend item 14 for fuel code and description.

26 SUPPORTING FLUIDS AND SYSTEMS—MILITARY

CODE

ADI	Anti-Detonation Injection Fluid—Reciprocating Engine Aircraft.
W	Water Thrust Augmentation—Jet Aircraft.
WAI	Water-Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.
SP	Single Point Refueling.
PRESAIR	Air Compressors rated 3,000 PSI or more.
De-Ice	Anti-icing/De-icing/Defrosting Fluid (MIL-A-8243).

OXYGEN:

LPOX	Low pressure oxygen servicing.
HPOX	High pressure oxygen servicing.
LHOX	Low and high pressure oxygen servicing.
LOX	Liquid oxygen servicing.
OXRB	Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be replenished only by replacement of cylinders.)
OX	Indicates oxygen servicing when type of servicing is unknown.

NOTE: Combinations of above items is used to indicate complete oxygen servicing available;

LHOXRB	Low and high pressure oxygen servicing and replacement bottles;
LPOXRB	Low pressure oxygen replacement bottles only, etc.

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

NITROGEN:

LPNIT	Low pressure nitrogen servicing.
HPNIT	High pressure nitrogen servicing.
LHNIT	Low and high pressure nitrogen servicing.

27 OIL—MILITARY

US AVIATION OILS (MIL SPECS):

CODE	GRADE, TYPE
0-113	1065, Reciprocating Engine Oil (MIL-L-6082)
0-117	1100, Reciprocating Engine Oil (MIL-L-6082)
0-117+	1100, 0-117 plus cyclohexanone (MIL-L-6082)
0-123	1065, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type III)
0-128	1100, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type II)
0-132	1005, Jet Engine Oil (MIL-L-6081)
0-133	1010, Jet Engine Oil (MIL-L-6081)
0-147	None, MIL-L-6085A Lubricating Oil, Instrument, Synthetic
0-148	None, MIL-L-7808 (Synthetic Base) Turbine Engine Oil
0-149	None, Aircraft Turbine Engine Synthetic, 7.5c St
0-155	None, MIL-L-6086C, Aircraft, Medium Grade
0-156	None, MIL-L-23699 (Synthetic Base), Turboprop and Turboshaft Engines
JOAP/SOAP	Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request. (JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service supported program.)

28 TRANSIENT ALERT (TRAN ALERT)—MILITARY

Transient Alert service is considered to include all services required for normal aircraft turn-around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute repack, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN-AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

(29) AIRPORT REMARKS

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note "See Special Notices" shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional Information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

(30) MILITARY REMARKS

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non-operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircrews and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non-US military airport is used as an alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11-204, AR 95-27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on aboard are designated Code 6 or higher as explained in AFJMAN 11-213, AR 95-11, OPNAVINST 3722-8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

(31) WEATHER DATA SOURCES

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS-3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS—Automated Weather Observing System

AWOS-A—reports altimeter setting (all other information is advisory only).

AWOS-1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS-2—reports the same as AWOS-1 plus visibility.

AWOS-3—reports the same as AWOS-1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION

LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.

LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers.

SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.

SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.

TDWR—indicates airports that have Terminal Doppler Weather Radar.

WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.

(32) COMMUNICATIONS

Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading "COMMUNICATIONS." When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1-800-WX-BRIEF (1-800-992-7433). When the FSS is located on the field it will be indicated as "on arpt". Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation.

(See AIM, Para 4-1-9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90-42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies-Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

- a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
- b. 122.2 is assigned as a common enroute frequency.
- c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
- d. 122.1 is the primary receive-only frequency at VOR's.
- e. Some FSS's are assigned 50 KHz frequencies in the 122-126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remoted facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter "T" or "R", indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

TERMINAL SERVICES

SFA—Single Frequency Approach.

CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.

ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.

D-ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.

AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.

UNICOM—A non-government air/ground radio communications facility which may provide airport information.

PTD—Pilot to Dispatcher.

APP CON—Approach Control. The symbol (R) indicates radar approach control.

TOWER—Control tower.

GCA—Ground Control Approach System.

GND CON—Ground Control.

GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four "key clicks" on the

VHF radio to contact the appropriate ATC facility or six "key clicks" to contact the FSS. The GCO system is intended to be used only on the ground.

DEP CON—Departure Control. The symbol (R) indicates radar departure control.

CLNC DEL—Clearance Delivery.

PRE TAXI CLNC—Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.

Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.

COMD POST—Command Post followed by the operator call sign in parenthesis.

PMSV—Pilot-to-Metro Service call sign, frequency and hours of operation, when full service is other than continuous.

PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or hours of operation as "Wx obsn svc 1900-0000Z" or "other times" may be used when no specific time is given. PMSV facilities manned by forecasters are considered "Full Service". PMSV facilities manned by weather observers are listed as "Limited Service".

OPS—Operations followed by the operator call sign in parenthesis.

CON

RANGE

FLT FLW—Flight Following

MEDIVAC

NOTE: Communication frequencies followed by the letter "X" indicate frequency available on request.

(33) AIRSPACE

Information concerning Class B, C, and part-time D and E surface area airspace shall be published with effective times. Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.

CLASS B—Radar Sequencing and Separation Service for all aircraft in CLASS B airspace.

CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.

TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area. Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.

When part-time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:

AIRSPACE: CLASS C svc "times" ctc APP CON other times CLASS E:

or

AIRSPACE: CLASS D svc "times" other times CLASS E.

When a part-time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700' or 1200' AGL. This will be formatted as:

AIRSPACE: CLASS C svc "times" ctc APP CON other times CLASS G, with CLASS E 700' (or 1200') AGL & abv:

or

AIRSPACE: CLASS D svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv:

or

AIRSPACE: CLASS E svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv.

NOTE: AIRSPACE SVC "TIMES" INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS. Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part-time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part-time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.

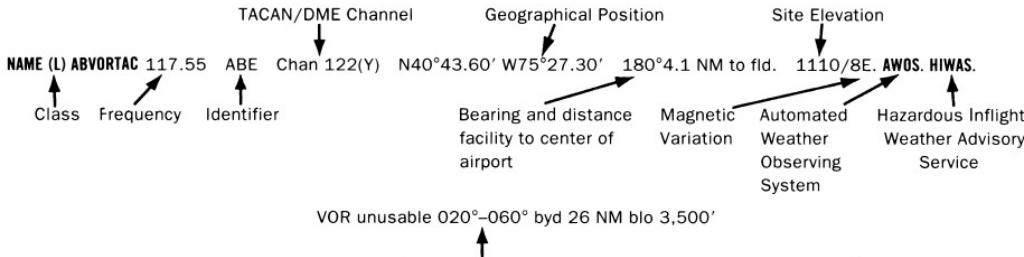
NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.

Class E 700' AGL (shown as magenta vignette on sectional charts) and 1200' AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700'/1200' AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.

(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)

34 RADIO AIDS TO NAVIGATION

The Airport/Facility Directory lists, by facility name, all Radio Aids to Navigation that appear on National Aeronautical Navigation Services Visual or IFR Aeronautical Charts and those upon which the FAA has approved an Instrument Approach Procedure, with exception of selected TACANs. Military TACAN information will be published for Military facilities contained in this publication. All VOR, VORTAC, TACAN, ILS and MLS equipment in the National Airspace System has an automatic monitoring and shutdown feature in the event of malfunction. Unmonitored, as used in this publication, for any navigational aid, means that monitoring personnel cannot observe the malfunction or shutdown signal. The NAVAID NOTAM file identifier will be shown as "NOTAM FILE IAD" and will be listed on the Radio Aids to Navigation line. When two or more NAVAIDS are listed and the NOTAM file identifier is different from that shown on the Radio Aids to Navigation line, it will be shown with the NAVAID listing. NOTAM file identifiers for ILSs and its components (e.g., NDB (LOM) are the same as the associated airports and are not repeated. Automated Surface Observing System (ASOS), Automated Weather Observing System (AWOS), and Hazardous Inflight Weather Advisory Service (HIWAS) will be shown when this service is broadcast over selected NAVAIDs. NAVAID information is tabulated as indicated in the following sample:



Restriction within the normal altitude/range of the navigational aid (See primary alphabetical listing for restrictions on VORTAC and VOR/DME).

Note: Those DME channel numbers with a (Y) suffix require TACAN to be placed in the "Y" mode to receive distance information.

HIWAS—Hazardous Inflight Weather Advisory Service is a continuous broadcast of inflight weather advisories including summarized SIGMETs, convective SIGMETs, AIRMETs and urgent PIREPs. HIWAS is presently broadcast over selected VOR's throughout the U.S.

ASR/PAR—Indicates that Surveillance (ASR) or Precision (PAR) radar instrument approach minimums are published in the U.S. Terminal Procedures. Only part-time hours of operation will be shown.

RADIO CLASS DESIGNATIONS

VOR/DME/TACAN Standard Service Volume (SSV) Classifications

<u>SSV Class</u>	<u>Altitudes</u>	<u>Distance (NM)</u>
(T) Terminal	1000' to 12,000'	25
(L) Low Altitude	1000' to 18,000'	40
(H) High Altitude	1000' to 14,500' 14,500' to 18,000' 18,000' to 45,000' 45,000' to 60,000'	40 100 130 100

NOTE: Additionally, (H) facilities provide (L) and (T) service volume and (L) facilities provide (T) service. Altitudes are with respect to the station's site elevation. Coverage is not available in a cone of airspace directly above the facility.

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DIRECTORY LEGEND

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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

AB	Automatic Weather Broadcast.
DF	Direction Finding Service.
DME	UHF standard (TACAN compatible) distance measuring equipment.
DME(Y)	UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the "Y" mode to receive DME.
GS	Glide slope.
H	Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).
HH	Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).
H-SAB	Non-directional radio beacons providing automatic transcribed weather service.
ILS	Instrument Landing System (voice, where available, on localizer channel).
IM	Inner marker.
ISMLS	Interim Standard Microwave Landing System.
LDA	Localizer Directional Aid.
LMM	Compass locator station when installed at middle marker site (15 NM at all altitudes).
LOM	Compass locator station when installed at outer marker site (15 NM at all altitudes).
MH	Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).
MLS	Microwave Landing System.
MM	Middle marker.
OM	Outer marker.
S	Simultaneous range homing signal and/or voice.
SABH	Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.
SDF	Simplified Direction Facility.
TACAN	UHF navigational facility-omnidirectional course and distance information.
VOR	VHF navigational facility-omnidirectional course only.
VOR/DME	Collocated VOR navigational facility and UHF standard distance measuring equipment.
VORTAC	Collocated VOR and TACAN navigational facilities.
W	Without voice on radio facility frequency.
Z	VHF station location marker at a LF radio facility.

DIRECTORY LEGEND**ILS FACILITY PERFORMANCE CLASSIFICATION CODES**

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A – 4 NM prior to runway threshold, B – 3500 ft prior to runway threshold, C – glide angle dependent but generally 750–1000 ft prior to threshold, T – runway threshold, D – 3000 ft after runway threshold, and E – 2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:

ILS/DME 108.5 I-ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.

ILS Facility Performance
Classification Code

FREQUENCY PAIRING PLAN AND MLS CHANNELING

MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL
500	108.10	18X	568	109.45	31Y	636	114.15	88Y
502	108.30	20X	570	109.55	32Y	638	114.25	89Y
504	108.50	22X	572	109.65	33Y	640	114.35	90Y
506	108.70	24X	574	109.75	34Y	642	114.45	91Y
508	108.90	26X	576	109.85	35Y	644	114.55	92Y
510	109.10	28X	578	109.95	36Y	646	114.65	93Y
512	109.30	30X	580	110.05	37Y	648	114.75	94Y
514	109.50	32X	582	110.15	38Y	650	114.85	95Y
516	109.70	34X	584	110.25	39Y	652	114.95	96Y
518	109.90	36X	586	110.35	40Y	654	115.05	97Y
520	110.10	38X	588	110.45	41Y	656	115.15	98Y
522	110.30	40X	590	110.55	42Y	658	115.25	99Y
524	110.50	42X	592	110.65	43Y	660	115.35	100Y
526	110.70	44X	594	110.75	44Y	662	115.45	101Y
528	110.90	46X	596	110.85	45Y	664	115.55	102Y
530	111.10	48X	598	110.95	46Y	666	115.65	103Y
532	111.30	50X	600	111.05	47Y	668	115.75	104Y
534	111.50	52X	602	111.15	48Y	670	115.85	105Y
536	111.70	54X	604	111.25	49Y	672	115.95	106Y
538	111.90	56X	606	111.35	50Y	674	116.05	107Y
540	108.05	17Y	608	111.45	51Y	676	116.15	108Y
542	108.15	18Y	610	111.55	52Y	678	116.25	109Y
544	108.25	19Y	612	111.65	53Y	680	116.35	110Y
546	108.35	20Y	614	111.75	54Y	682	116.45	111Y
548	108.45	21Y	616	111.85	55Y	684	116.55	112Y
550	108.55	22Y	618	111.95	56Y	686	116.65	113Y
552	108.65	23Y	620	113.35	80Y	688	116.75	114Y
554	108.75	24Y	622	113.45	81Y	690	116.85	115Y
556	108.85	25Y	624	113.55	82Y	692	116.95	116Y
558	108.95	26Y	626	113.65	83Y	694	117.05	117Y
560	109.05	27Y	628	113.75	84Y	696	117.15	118Y
562	109.15	28Y	630	113.85	85Y	698	117.25	119Y
564	109.25	29Y	632	113.95	86Y			
566	109.35	30Y	634	114.05	87Y			

FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
2X	134.5	-	19Y	108.25	544	25X	108.80	-
2Y	134.55	-	20X	108.30	502	25Y	108.85	556
11X	135.4	-	20Y	108.35	546	26X	108.90	508
11Y	135.45	-	21X	108.40	-	26Y	108.95	558
12X	135.5	-	21Y	108.45	548	27X	109.00	-
12Y	135.55	-	22X	108.50	504	27Y	109.05	560
17X	108.00	-	22Y	108.55	550	28X	109.10	510
17Y	108.05	540	23X	108.60	-	28Y	109.15	562
18X	108.10	500	23Y	108.65	552	29X	109.20	-
18Y	108.15	542	24X	108.70	506	29Y	109.25	564
19X	108.20	-	24Y	108.75	554	30X	109.30	512

DIRECTORY LEGEND

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TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
30Y	109.35	566	63X	133.60	-	95Y	114.85	650
31X	109.40	-	63Y	133.65	-	96X	114.90	-
31Y	109.45	568	64X	133.70	-	96Y	114.95	652
32X	109.50	514	64Y	133.75	-	97X	115.00	-
32Y	109.55	570	65X	133.80	-	97Y	115.05	654
33X	109.60	-	65Y	133.85	-	98X	115.10	-
33Y	109.65	572	66X	133.90	-	98Y	115.15	656
34X	109.70	516	66Y	133.95	-	99X	115.20	-
34Y	109.75	574	67X	134.00	-	99Y	115.25	658
35X	109.80	-	67Y	134.05	-	100X	115.30	-
35Y	109.85	576	68X	134.10	-	100Y	115.35	660
36X	109.90	518	68Y	134.15	-	101X	115.40	-
36Y	109.95	578	69X	134.20	-	101Y	115.45	662
37X	110.00	-	69Y	134.25	-	102X	115.50	-
37Y	110.05	580	70X	112.30	-	102Y	115.55	664
38X	110.10	520	70Y	112.35	-	103X	115.60	-
38Y	110.15	582	71X	112.40	-	103Y	115.65	666
39X	110.20	-	71Y	112.45	-	104X	115.70	-
39Y	110.25	584	72X	112.50	-	104Y	115.75	668
40X	110.30	522	72Y	112.55	-	105X	115.80	-
40Y	110.35	586	73X	112.60	-	105Y	115.85	670
41X	110.40	-	73Y	112.65	-	106X	115.90	-
41Y	110.45	588	74X	112.70	-	106Y	115.95	672
42X	110.50	524	74Y	112.75	-	107X	116.00	-
42Y	110.55	590	75X	112.80	-	107Y	116.05	674
43X	110.60	-	75Y	112.85	-	108X	116.10	-
43Y	110.65	592	76X	112.90	-	108Y	116.15	676
44X	110.70	526	76Y	112.95	-	109X	116.20	-
44Y	110.75	594	77X	113.00	-	109Y	116.25	678
45X	110.80	-	77Y	113.05	-	110X	116.30	-
45Y	110.85	596	78X	113.10	-	110Y	116.35	680
46X	110.90	528	78Y	113.15	-	111X	116.40	-
46Y	110.95	598	79X	113.20	-	111Y	116.45	682
47X	111.00	-	79Y	113.25	-	112X	116.50	-
47Y	111.05	600	80X	113.30	-	112Y	116.55	684
48X	111.10	530	80Y	113.35	620	113X	116.60	-
48Y	111.15	602	81X	113.40	-	113Y	116.65	686
49X	111.20	-	81Y	113.45	622	114X	116.70	-
49Y	111.25	604	82X	113.50	-	114Y	116.75	688
50X	111.30	532	82Y	113.55	624	115X	116.80	-
50Y	111.35	606	83X	113.60	-	115Y	116.85	690
51X	111.40	-	83Y	113.65	626	116X	116.90	-
51Y	111.45	608	84X	113.70	-	116Y	116.95	692
52X	111.50	534	84Y	113.75	628	117X	117.00	-
52Y	111.55	610	85X	113.80	-	117Y	117.05	694
53X	111.60	-	85Y	113.85	630	118X	117.10	-
53Y	111.65	612	86X	113.90	-	118Y	117.15	696
54X	111.70	536	86Y	113.95	632	119X	117.20	-
54Y	111.75	614	87X	114.00	-	119Y	117.25	698
55X	111.80	-	87Y	114.05	634	120X	117.30	-
55Y	111.85	616	88X	114.10	-	120Y	117.35	-
56X	111.90	538	88Y	114.15	636	121X	117.40	-
56Y	111.95	618	89X	114.20	-	121Y	117.45	-
57X	112.00	-	89Y	114.25	638	122X	117.50	-
57Y	112.05	-	90X	114.30	-	122Y	117.55	-
58X	112.10	-	90Y	114.35	640	123X	117.60	-
58Y	112.15	-	91X	114.40	-	123Y	117.65	-
59X	112.20	-	91Y	114.45	642	124X	117.70	-
59Y	112.25	-	92X	114.50	-	124Y	117.75	-
60X	133.30	-	92Y	114.55	644	125X	117.80	-
60Y	133.35	-	93X	114.60	-	125Y	117.85	-
61X	133.40	-	93Y	114.65	646	126X	117.90	-
61Y	133.45	-	94X	114.70	-	126Y	117.95	-
62X	133.50	-	94Y	114.75	648			
62Y	133.55	-	95X	114.80	-			

⑯

COMM/NAV/WEATHER REMARKS:

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

ABINGDON**VIRGINIA HIGHLANDS** (VJI) 2 W UTC-5(-4DT) N36°41.23' W82°02.00'

2087 B FUEL 100LL, JET A TPA—3077 (990) NOTAM FILE VJI

RWY 06-24: H4471X75 (ASPH) S-12.5 MIRL 0.6% up NE

RWY 06: Brush. RWY 24: ODALS. REIL. PAPI(P2L). Tree.

AIRPORT REMARKS: Attended Dec-Mar 1200-0000Z‡, Sat-Sun

1200-2200Z‡, Apr-Nov 1200-0200Z‡. For fuel after hrs call

276-628-6030/623-8686. Wildlife on and invof arpt. Ultralights

on and in vicinity of arpt. MIRL Rwy 06-24 preset low ints.

ACTIVATE higher ints, PAPI Rwy 24, ODALS Rwy 24 and REIL Rwy 24—CTAF.

WEATHER DATA SOURCES: AWOS-3 128.125 (276) 628-2940. Ceiling unreliable indef. Visibility unreliable indef.**COMMUNICATIONS:** CTAf/UNICOM 122.8

HOLSTON MOUNTAIN, TN RCO 122.1R 114.6T (NASHVILLE RADIO)

(R) TRI CITY APP/DEP CON 128.67 (1100-0500Z‡)

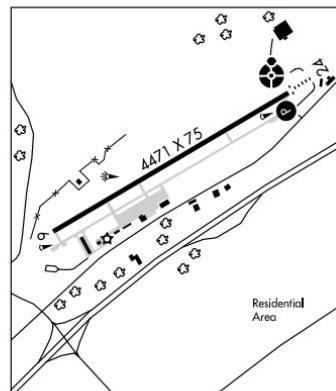
(R) ATLANTA CENTER APP/DEP CON 127.85 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE BNA.

HOLSTON MOUNTAIN (L) VORTAC 114.6 HMV Chan 93 N36°26.22' W82°07.78' 021° 15.7 NM to fid. 4321/04W.

WHINE NDB (MHW/LOM) 236 VJ N36°44.02' W81°56.94' 241° 4.9 NM to fid. NOTAM FILE VJI. Unmonitored when arpt unattended. Unusable byd 15 NM.

ILS/DME 108.3 I-VJI Chan 20 Rwy 24. LOC only. LOM WHINE NDB. LOC/DME unmonitored when arpt unattended. LOC unusable byd 30° right of course.

**ACCOMACK CO** (See MELFA)**ALLEN C. PERKINSON/BAAF** (See BLACKSTONE)**A P HILL AAF** (FORT A P HILL) (APH)(KAPH) A UTC-5(-4DT) N38°04.13' W77°19.10' WASHINGTON L-34E, 36H

220 TPA—See Remarks NOTAM FILE DCA Not insp.

RWY 05-23: 2201X100 (TURF)

RWY 23: Rgt tfc.

MILITARY SERVICE: FUEL J8 Avbl 1300-2130Z‡ with 24 hr PPR DSN 578-8224/8374, C804-633-8224/8374 Dial 8360 from fld phone if Petrol, Oils and Lubricants truck not at fld.**AIRPORT REMARKS:** Attended Mon-Fri 1300-2100Z‡, excluding holidays, other times on req. RSTD 24 hr PPR all acft.Use of airfld by fixed wing acft emerg only. Rwy 11-29 CLOSED to Arr/Dep traffic. **CAUTION** Range impact area R-6601 located 600 meters SE of rwy. **TFC PAT** TPA-900(680) **MISC** 40X40 conc pad SE of rwy at midfld. Flight plans open/cld by phone Leesburg FSS, dial 9-1-800-468-6621. Phone avbl under shelter adjacent to twr.

Attended/advisory service from range control Mon-Fri. HILL RDO CTAf 241.0 FM 38.5 A/G use.

COMMUNICATIONS: CTAf 126.2

(R) POTOMAC APP/DEP CON 134.7 307.2

RANGE CONTROL 38.5

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

NDB (MHW) 396 APH N38°05.27', W77°19.50' 173° 1.1 NM to fid. Unmonitored 2130-1300Z‡.

APOLLO SOUCEK FLD (See OCEANA)**ARMEL** N38°56.08' W77°28.00' NOTAM FILE IAD.

(L) VORTAC 113.5 AML Chan 82 at Washington Dulles Intl. 297/08W.

VOR portion unusable:

123°-135° byd 20NM blo 2500'

145°-155°

210°-250°

320°-050° byd 15 NM

DME unusable byd 35 NM blo 2500'.

RCO 122.1R 113.5T (LEESBURG RADIO)

WASHINGTON
H-10H, L-29E, 34E, 36I, A**AZALEA PARK** N38°00.61' W78°31.09' NOTAM FILE CHO.

NDB (MHW) 336 AZS 030° 8.3 NM to Charlottesville-Albemarle.

NDB unmonitored when twr clsd.

WASHINGTON
L-26J, 36H**BALES** N36°35.39' W79°55.04' NOTAM FILE MTV.

NDB (MHW/LOM) 396 UV 304° 5.5 NM to Blue Ridge. Unmonitored when arpt unattended.

CINCINNATI
L-26J, 36F

BLACKSBURG**VIRGINIA TECH/MONTGOMERY EXECUTIVE**

(BCB) 3 S UTC-5(-4DT) N37°12.46' W80°24.47' NOTAM FILE BCB

2132 B S4 FUEL 100LL, JET A TPA-See Remarks
RWY 12-30: H4539X100 (ASPH) MIRL 0.4% up SE

RWY 12: ODALS. PAPI(P4L)—GA 3.0° TCH 40'. Road.

RWY 30: REIL. PAPI(P2L)—GA 3.75°. Brush.

AIRPORT REMARKS: Attended Apr–Oct 1300–2300Z‡, Nov–Mar

1300–0000Z‡. PPR for fuel when arpt unattended; phone 540-231-4444. Occasional wildlife on arpt. Noise sensitive area north of arpt. VFR departures maintain rwy heading until reaching 1000 ft AGL. NSTD twy in-line with rwy. White arrow should be yellow. Thld is end of rwy. NSTD marking prior to thld Rwy 30. Marking should be for twy inline with rwy. MIRL Rwy 12–30 preset low ints, ACTIVATE higher ints, ODALS Rwy 12, PAPI Rwy 30 and REIL Rwy 30—CTAF. TPA 3132(1000) for non turbine powered acft, 3632(1500) turbine powered acft.

WEATHER DATA SOURCES: AWOS-3 133.325 (540) 231–4837.

COMMUNICATIONS: CTAf/UNICOM 123.05

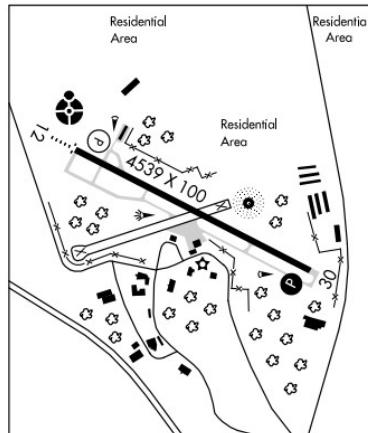
ROANOKE APP/DEP CON 126.9 ROANOKE CLNC DEL 124.85

RADIO AIDS TO NAVIGATION: NOTAM FILE PSK.

PULASKI (H) VORTAC 116.8 PSK Chan 115 N37°05.26' W80°42.77' 070° 16.3 NM to fld. 2120/06W. HIWAS.

TECH NDB (MHW) 368 TEC N37°12.52' W80°24.21' at fld.
NOTAM FILE BCB.

ILS/DME 109.1 I-BCB Chan 28 Rwy 12. (LOC only). LOC/DME unmonitored when arpt unattended.

**BLACKSTONE** N37°07.65' W78°02.67' NOTAM FILE DCA

NDB (MHW) 326 BKT 135° 5.5 NM to Allen C Perkinson/BAAF.

WASHINGTON

L-36H

BLACKSTONE**ALLEN C. PERKINSON BLACKSTONE AAF** (FORT PICKETT) (BKT) 2 E UTC-5(-4DT)

WASHINGTON

L-36H

N37°04.46' W77°57.44'
439 B FUEL 100LL, JET A NOTAM FILE DCA
RWY 04-22: H4632X150 (CONC) PCN 64 R/C/W/T MIRL
0.8% up NE

RWY 04: Tree. RWY 22: Thld dsplcd 700'. Tree.

RWY 01-19: H4032X75 (ASPH-CON) PCN 1 R/D/W/T

RWY 01: Tree. RWY 19: Tree. Rgt tfc.

MILITARY SERVICE: FUEL A+, J8 (Mil) (NC-100LL, A) (Town of Blackstone,
Opr Mon–Fri 1300–2200Z‡, C434–292–7251, other times
C434–645–4824 or C434–292–7558.)AIRPORT REMARKS: Attended Mon–Fri 1700–0130Z‡. Clsd federal
holidays. Parachute Jumping. Ldg Rwy 01 and tkf Rwy 19 not
authorized. Rwy 01–19 pavement cracked, spalling, and has
foreign object damage entire length. Used by state police for
vehicle defensive driving at various times requiring temporary
closure of rwy. Avoid flight over ammunition supply point. Jet and
military training within 20 NM radius. Extensive C130 tfc and
frequent parachute drops. C-130 and C-17 PPR for ldg Rwy
04–22 call 434–292–2193. When twr clsd ACTIVATE MIRL Rwy
04–22—CTAF. Rwy 22 has 700 ft relocated thld.

MILITARY REMARKS: Military acft ctc RANGE OPS. RSTD 24 hr PPR DSN

438–2193 for ldg at post helipads. Military opr call C434–292–2193/2116. Rwy 04–22 PPR and rwy condition
call C434–292–2193. MISc Crash/Rescue svc DSN 438–2193/2217.

COMMUNICATIONS: CTAf/UNICOM 122.95

(R) WASHINGTON CENTER APP/DEP CON 118.75 377.1

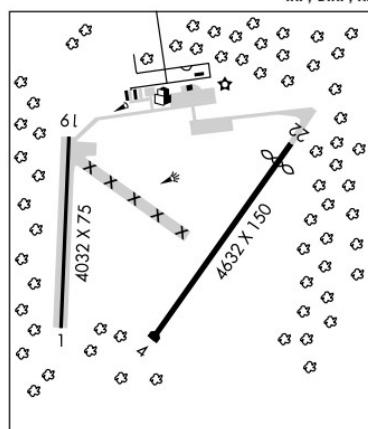
BLACKSTONE TOWER 38.3 126.2 241.0 Opr Mon–Fri 1200–2030Z‡ except federal holidays. Other times by NOTAM.
RANGE OPS 38.3 41.05

AIRSPACE: CLASS D svc Mon–Fri 1200–2030Z‡ except holidays. Other times by NOTAM. Other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

LAWRENCEVILLE (L) VORTAC 112.9 LVL Chan 76 N36°49.08' W77°54.18' 358° 15.6 NM to fld. 350/08W.

BLACKSTONE NDB (MHW) 326 BKT N37°07.65' W78°02.67' 126° 5.5 NM to fld.

**BLUE RIDGE** (See MARTINSVILLE)

BOJAR N37°15.75' W 79°14.60' NOTAM FILE LYH.

NDB (MHW/LOM) 385 LY 036° 4.4 NM to Lynchburg Rgnl-Preston Glenn Fld.

NDB unmonitored when tower clsd.

CINCINNATI

L-26J, 36G

BRIDGEWATER AIR PARK (VBW) 1 NW UTC-5(-4DT) N38°22.00' W78°57.62'

1165 B FUEL 100LL, JET A NOTAM FILE DCA

RWY 15-33: H2745X60 (ASPH) S-22 MIRL 0.3% up SE

RWY 15: Tree. **RWY 33:** Thld dispclcd 368'. Pole.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z‡, Sat

1400-2100Z‡, and Sun 1700-2100Z‡. ACTIVATE MIRL Rwy
15-33—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) POTOMAC APP/DEP CON 132.85

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

MONTEBELLO (L) VOR/DME 115.3 MOL Chan 100 N37°54.03'
W79°06.41' 019° 28.8 NM to fld. 3460/05W.

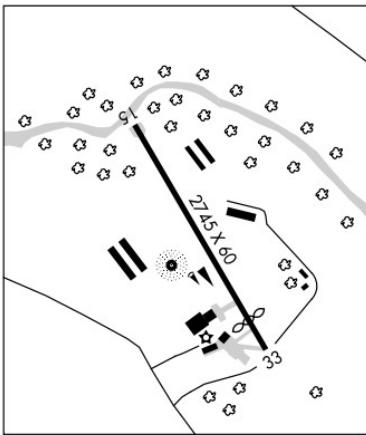
NDB (MHW) 241 VBW N38°21.94' W78°57.67' at fld.

Unmonitored when arpt unattended. Unusable 225°-235° byd
21 NM.

WASHINGTON

L-26J

IAP



BROOKE N38°20.18' W77°21.18' NOTAM FILE DCA.

(L) **VORTAC** 114.5 BRV Chan 92 237°6.2 NM to Shannon. 145/09W.

WASHINGTON

H-10H, L-29E, 34E, 36I, A

VOR portion unusable:

077°-083°

341°-006° byd 10 NM blo 5500'

084° byd 16 NM

341°-006° byd 30 NM blo 8500'

084° blo 9000'

341°-006° byd 36 NM

085°-089° byd 16 NM

341°-006° blo 2500'

090°-140° byd 10 NM blo 3000'

DME portion unusable byd 35 NM blo 3500'

VORTAC unusable:

141°-308° byd 10 NM blo 3000'

141°-308° byd 24 NM blo 6000'

RCO 122.1R 114.5T (LEESBURG RADIO)

BROOKNEAL/CAMPBELL CO (0V4) 06 NW UTC-5(-4DT) N37°08.50' W79°00.98'

596 B NOTAM FILE DCA

CINCINNATI

L-26J, 36G

IAP

RWY 06-24: H3798X60 (ASPH) S-12.5 MIRL

RWY 06: Tree. **RWY 24:** Tree.

AIRPORT REMARKS: Unattended. Ultralight activity on and invof arpt.

MIRL Rwy 06-24 preset low, ACTIVATE higher ints—CTAF.

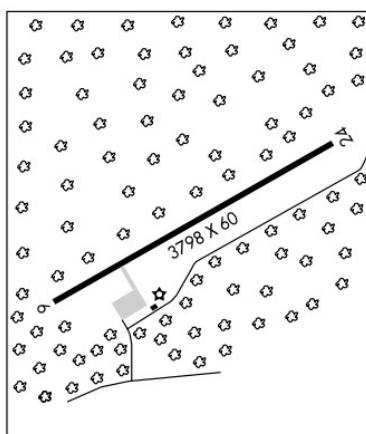
COMMUNICATIONS: CTAF/UNICOM 122.7

(R) **ROANOKE APP/DEP CON** 125.47 (East of LYH VORTAC) 135.0 (West of LYH VORTAC)

RADIO AIDS TO NAVIGATION: NOTAM FILE LYH.

LYNCHBURG (L) **VORTAC** 109.2 LYH Chan 29 N37°15.28'

W79°14.19' 128° 12.5 NM to fld. 880/05W. HIWAS.



BUCK'S ELBOW MOUNTAIN N38°06.25' W78°44.62'

RCO 122.65 122.2 (LEESBURG RADIO)

WASHINGTON

L-26J, 36H

BUMPASS

LAKE ANNA (7W4) 0 NW UTC-5(-4DT) N37°57.94' W77°44.75'
 355 B NOTAM FILE DCA
RWY 08-26: H2560X25 (ASPH) S-6 LIRL (NSTD)
 RWY 08: Trees. **RWY 26:** Trees.
AIRPORT REMARKS: Unattended. No students.
COMMUNICATIONS: CTAF 122.9

WASHINGTON

CAMPBELL FLD (See WEIRWOOD)

CAMP PEARY LNDG STRIP (W94) A 3 NE UTC-5(-4DT) N37°18.77' W76°38.29' **WASHINGTON**
 41 NOTAM FILE DCA Not Insp **H-10I, 12I, L-34E, 36H**
RWY 05-23: H5018X51 (ASPH)
MILITARY REMARKS: Attended Mon-Fri 1300-2130Z#. Field rstd, PPR by written req to Base Commander, Attn: Air OPS. Exc when opr under prior permission auth, pilots should maintain at least 3000' abv the arpt elevation within 5 NM.
COMMUNICATIONS:
 (R) NORFOLK APP/DEP CON 125.7 335.625
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.
 HARCUM (L) VORTAC 108.8 HCM Chan 25 N37°26.92' W76°42.68' 164° 8.9 NM to fld. 10/07W.

IAP

CAPE CHARLES N37°20.85' W75°59.86' NOTAM FILE DCA. **WASHINGTON**
 (L) VORTAC 112.2 CCV Chan 59 042° 21.2 NM to Accomack Co. 10/10W. **H-10I, 12H, L-35D, 36I**
 VOR portion unusable:
 137°-322° byd 17 NM blo 2000'
RCO 122.1R 112.2T (LEESBURG RADIO) 137°-322° byd 22 NM blo 3000'

CASANOVA N38°38.47' W77°51.93' NOTAM FILE DCA. **WASHINGTON**
 (H) VORTAC 116.3 CSN Chan 110 184° 6.9 NM to Culpeper Rgnl. 439/06W. **H-10H, L-29D, 34E, 36I, A**
 VORTAC unusable 310°-350° byd 10 NM blo 11000'.
RCO 122.1R 116.3T (LEESBURG RADIO)

A

CAVERNS N38°41.97' W78°28.30' NOTAM FILE DCA. **WASHINGTON**
 NDB (MHW) 245 LUA 224° 2.4 NM to Luray Caverns. Unmonitored when arpt unattended. **L-29G**
 Unusable 209°-049° byd 15 NM; 050°-208° byd 10 NM.

CHAMBERS FLD (See NORFOLK NS)

CHARLOTTESVILLE–ALBEMARLE (CHO) 7 N UTC–5(–4DT) N38°08.32' W78°27.17'

639 B S4 FUEL 100LL, JET A Class I, ARFF Index B NOTAM FILE CHO

RWY 03–21: H6001X150 (ASPH–GRVD) S-100, D-160, 2S-175, 2D-300 HIRL 0.3% up SW

RWY 03: MALSR.

RWY 21: REIL, VASI(V4L)—GA 3.0°TCH 50'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 03: TORA-6001 TODA-6001 ASDA-6001 LDA-6001

RWY 21: TORA-6001 TODA-6001 ASDA-6001 LDA-6001

AIRPORT REMARKS: Attended 0930–0530Z‡. Deer and birds on and invof arpt. PPR 8 hrs for unscheduled air carrier ops with more than 9 passenger seats between 0400–1100Z‡, call arpt manager 434–981–4152. When twr clsd HIRL Rwy 03–21 and twy lghts preset low ints and REIL Rwy 21 unavbl. To increase ints HIRL Rwy 03–21 and twy lghts and ACTIVATE MALSR Rwy 03—CTAF. VASI Rwy 21 not monitored. REIL not monitored. Landing fee only for acft over 7000 lbs. Wheeled helicopters are requested to ground taxi when transiting arpt.

WEATHER DATA SOURCES: ASOS 118.425 (434) 973–5024. ASOS wind unreliable.

COMMUNICATIONS: CTAF 124.5 ATIS 118.425 UNICOM 122.95

CHARLOTTESVILLE RCO 122.65 122.2 (LEESBURG RADIO)

(R) POTOMAC APP/DEP CON 132.85

TOWER 124.5 (1100–0400Z‡) GND CON 121.9

AIRSPACE: CLASS D svc 1100–0400Z‡ other times CLASS E.

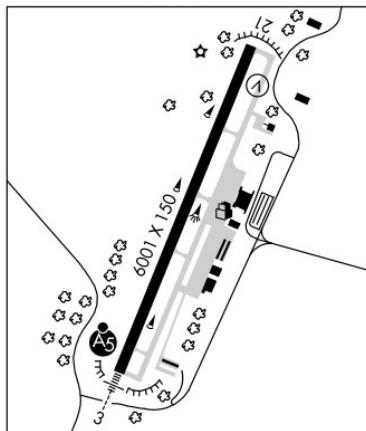
RADAR AIDS TO NAVIGATION: NOTAM FILE DCA.

GORDONVILLE (H) VORTAC 115.6 GVE Chan 103 N38°00.82' W78°09.18' 304° 16.1 NM to fld. 382/06W. HIWAS.

AZALEA PARK NDB (MHW) 336 AZS N38°00.61' W78°31.09' 030° 8.3 NM to fld. NOTAM FILE CHO.

NDB unmonitored when twr clsd. SHUTDOWN.

ILS/DME 111.7 I-CHO Chan 54 Rwy 03. Class IA. LOC/GS unmonitored when twr closed.

**CHASE CITY MUNI (CXE) 2 W UTC–5(–4DT) N36°47.30' W78°30.09'**

503 B TPA 1303 (800) NOTAM FILE DCA

RWY 18–36: H3400X50 (ASPH) S-12.5 LIRL 0.5% up N

RWY 18: TRCV(TRIL). Road. RWY 36: TRCV(TRIL). Tree.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. Rwy 18 TRCV OTS indef. Rwy 36 TRCV OTS indef.

COMMUNICATIONS: CTAF 122.9

(R) WASHINGTON CENTER APP/DEP CON 118.75

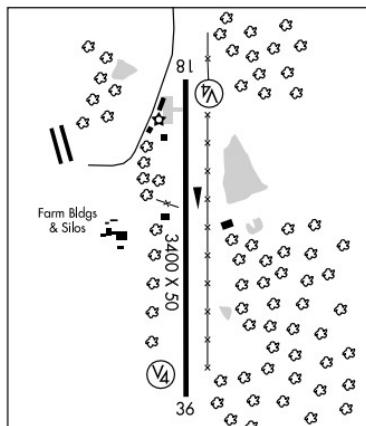
RADAR AIDS TO NAVIGATION: NOTAM FILE DCA.

SOUTH BOSTON (L) VORTAC 110.4 SBV Chan 41 N36°40.50' W79°00.87' 079° 25.7 NM to fld. 530/05W.

WASHINGTON

L-36G

IAPI

**CHESAPEAKE RGNL (See NORFOLK)****CHESI** N36°35.99' W76°22.91' NOTAM FILE ORF.

NDB (MHW/LOM) 233 EY 046° 4.9 NM to Chesapeake Rgnl.

WASHINGTON

L-35D

CHESTER**MC LAUGHLIN (2G6) 6 E UTC–5(–4DT) N37°19.23' W77°20.75'**

7 NOTAM FILE DCA Not insp.

WATERWAY 05–23: 2500X150 (WATER)

SEAPLANE REMARKS: unattended.

COMMUNICATIONS: CTAF 122.9

WASHINGTON

CHESTERFIELD CO (See RICHMOND)

CLARKSVILLE

LAKE COUNTRY RGNL (W63) 2 S UTC-5(-4DT) N36°35.75' W78°33.61'

421 B TPA—1221(800) NOTAM FILE DCA

RWY 04-22: H4488X50 (ASPH) S-12.5 MIRL

RWY 04: Tree. RWY 22: Thld dsplcd 460'. Road.

AIRPORT REMARKS: Unattended. For fuel call number posted beside public pay phone on side of hangar. Wildlife invof arpt.

COMMUNICATIONS: CTAF 122.9

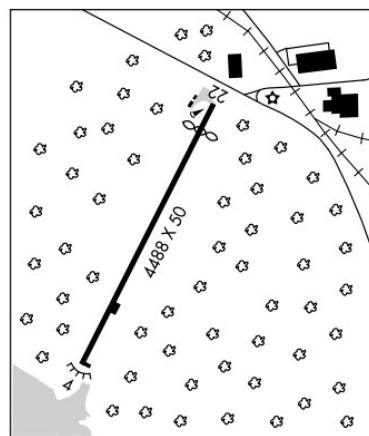
WASHINGTON CENTER APP/DEP CON 118.75

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

SOUTH BOSTON (L) VORTAC 110.4 SBV Chan 41 N36°40.50'

W79°00.87' 107° 22.5 NM to fld. 530/05W.

WASHINGTON
L-36G
IAP

**CREWE MUNI** (W81) 1E UTC-5(-4DT) N37°10.86' W78°05.90'

420 B S2 FUEL 100LL NOTAM FILE DCA

RWY 15-33: H3300X60 (ASPH) S-12 MIRL

RWY 15: APAP(PNIL)—GA 5.0° TCH 17'. Thld dsplcd 87'. Ground.

RWY 33: APAP(PNIL)—GA 3.0° TCH 8'. Tree.

AIRPORT REMARKS: Attended 1400–2200Z‡. Deer and turkey on and invof arpt. For airframe and power plant repairs call 804-645-9393. Rwy 15 APAP not lgtd. PNIL unavailable at night. Rwy 33 APAP not lgtd. PNIL unavailable at night. For MIRL Rwy 15-33 key CTAF 5 times on; 3 times off.

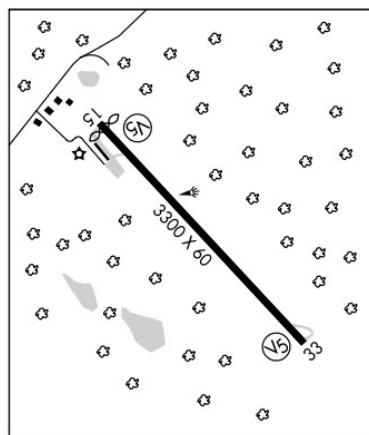
COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

LAWRENCEVILLE (L) VORTAC 112.9 LVL Chan 76 N36°49.08'

W77°54.18' 345° 23.7 NM to fld. 350/08W.

WASHINGTON
L-36H



CULPEPER RGNL (CJR) 7 NE UTC-5(-4DT) N38°31.53' W77°51.58'

316 B S4 FUEL 100LL, JET A NOTAM FILE CJR

RWY 04-22: H5000X100 (ASPH) S-40 MIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Fence.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Bldg.

AIRPORT REMARKS: Attended Nov–Apr 1300–2300Z‡, May–Oct 1300–0100Z‡. Deer on and invof arpt. ACTIVATE MIRL Rwy 04–22, REIL Rwy 04, PAPI Rwy 04, REIL Rwy 22, PAPI Rwy 22 and twy lghts—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.325 (540) 727–0523.**COMMUNICATIONS:** CTAf/UNICOM 123.075

CASANOVA RCO 122.1R 116.3T (LEESBURG RADIO)

(R) POTOMAC APP/DEP CON 124.65

GCC 121.6 (POTOMAC CLNC)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

CASANOVA (H) VORTAC 116.3 CSN Chan 110 N38°38.47' W77°51.93' 184° 6.9 NM to fld. 439/06W.

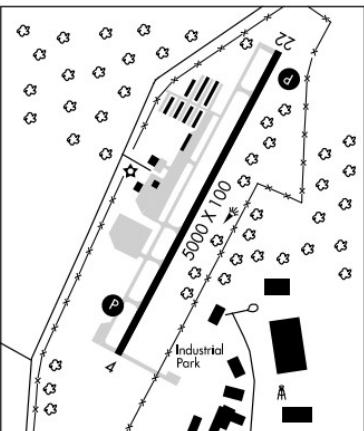
NAIRL NDB (MHW) 351 MSQ N38°27.26' W77°54.32' 037° 4.8 NM to fld.

ILS 109.95 I-DZH Rwy 04. LOC only.

WASHINGTON

H-10H, 12I, L-29E, 34E, 36I, A

IAP

**DANVILLE RGNL** (DAN) 3 E UTC-5(-4DT) N36°34.37' W79°20.17'

571 B S2 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE DAN

CINCINNATI

H-9C, 12I, L-26J, 36G

IAP

RWY 02-20: H6500X150 (ASPH-GRVD) S-90, D-130, 2S-165 HIRL 0.4% up N

RWY 02: MALSR. PAPI(P4L)—GA 3.0°TCH 54'.

RWY 20: REIL. PAPI(P4L)—GA 3.0° TCH 50'. Thld dsplcd 900'. Tree.

RWY 13-31: H4020X100 (ASPH) S-90, D-130, 2S-165

MIRL 1.1% up NW

RWY 13: REIL. VASI(V2L)—GA 3.0°. Tree.

RWY 31: REIL. VASI(V2L)—GA 3.0°. TCH 73'. Road.

RUNWAY DECLARED DISTANCE INFORMATION:

RWY 02: TORA-6500 TODA-6500 ASDA-5600 LDA-5600

RWY 20: TORA-6500 TODA-6500 ASDA-6500 LDA-5600

AIRPORT REMARKS: Attended Mon–Fri 1100–0200Z‡, Sat–Sun 1200–0000Z‡. Arpt unattended Christmas Day. Rwy 02–20 cracks in pavement. Birds and deer on and invof arpt. Trees penetrating 7:1 transitional sfc of Rwy 31 both sides, first 1000'. Ctc arpt administration prior to conducting specialized aero activities 434–799–5110. TPA-1371 (800) lgt aircraft, 2071 (1500) turbine aircraft. Rwy 02 is designated calm wind rwy. Rwy 31 VASI unusable byd 8° left of course. ACTIVATE HIRL Rwy 02–20; MIRL Rwy 13–31; REIL Rwy 13 and 31 and 20; MALSR Rwy 02; VASI Rwy 13 and 31; PAPI Rwy 02 and 20—CTAF.

WEATHER DATA SOURCES: ASOS 128.125 (434) 799–1701.**COMMUNICATIONS:** CTAf/UNICOM 123.05

RCO 122.2 (LEESBURG RADIO)

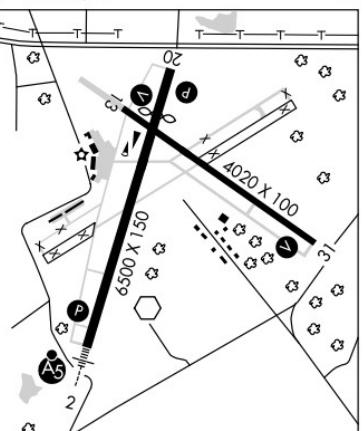
(R) WASHINGTON CENTER APP/DEP CON 124.05

AIRSPACE: CLASS E svc effective 1100–0300Z‡ other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE DCA.

SOUTH BOSTON (L) VORTAC 110.4 SBV Chan 41 N36°40.50' W79°00.87' 254° 16.7 NM to fld. 530/05W.

(L) VOR 113.1 DAN N36°34.13' W79°20.20' at fld. NOTAM FILE DAN.

ILS 110.7 I-DAN Rwy 02. Class IE. ILS unmonitored.

**DAVEE** N38°39.70' W77°06.61' NOTAM FILE DCA.

WASHINGTON

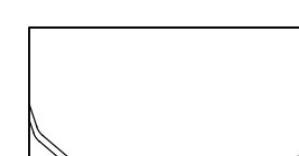
NDB (MHW/LOM) 223 DAA 323° 4.6 NM to Davison AAF (Fort Belvoir). Opr Mon–Fri 1000–0130Z‡

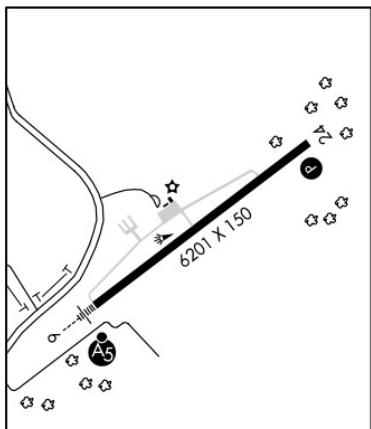
L-29E, 34E, 36I

except holidays.

DINWIDDIE CO (See PETERSBURG)

BLIN
NEW RIVER VALLEY (PSK) 2 N UTC-5(-4DT) N37°08.24' W80°40.71'
 2105 B S2 FUEL 100LL, JET A NOTAM FILE PSK
RWY 06-24: H6201X150 (ASPH) D-60 HIRL 0.5% up SW
RWY 06: MALSR. Ground.
RWY 24: REIL, PAPI(P4L)—GA 3.0° TCH 44'. Brush.
AIRPORT REMARKS: Attended Mon-Fri 1300-0000Z‡, Sat-Sun
 1400-2300Z‡. Military contract fuel unavbl. Deer on and invof arpt. Customs service on airport. ACTIVATE HIRL Rwy 06-24, MALSR Rwy 06, REIL Rwy 24 and PAPI Rwy 24—CTAF.
WEATHER DATA SOURCES: AWOS-3 127.375 (540) 674-2731. **HIWAS** 116.8 PSK.
COMMUNICATIONS: CTAF/UNICOM 122.7
PULASKI RCO 122.3 122.1R 116.8T (LEESBURG RADIO)
ROANOKE APP/DEP CON 126.0 **ROANOKE CLNC DEL** 121.7
RADIO AIDS TO NAVIGATION: NOTAM FILE PSK.
PULASKI (H) VORTAC 116.8 PSK Chan 115 N37°05.26'
 W80°42.77' 031° 2.9 NM to fld. 2120/06W. **HIWAS**.
ILS 110.9 I-PSK Rwy 06. Class IA. ILS unmonitored during hours arpt unattended.





EAGLE'S NEST (See WAYNESBORO)

EMPORIA-GREENSVILLE RGNL (EMV) 3 E UTC-5(-4DT) N36°41.21' W77°28.97' **WASHINGTON**
 127 B FUEL 100LL, JET A TPA—See Remarks NOTAM FILE EMV
RWY 15-33: H5010X100 (ASPH) S-30, D-50, 2D-85 MIRL 0.3% up N H-9C, 10H, 12H, L-36G
 RWY 15: REIL, PAPI(P2L)—GA 3.0° TCH 30'. Road.
 RWY 33: REIL, PAPI(P2L)—GA 3.0° TCH 30'. Road.

AIRPORT REMARKS: Attended 1400–2200Z‡. Deer on and in environs apt. TPA—1127(1000) light acft, 1627(1500) heavy acft. ACTIVATE MIRL Rwy 15-33, PAPI Rwy 15 and 33, and REIL Rwy 15 and 33—CTAF.

WEATHER DATA SOURCES: AWOS-3 124.175 (804) 434-0656.

COMMUNICATIONS: CTAF/UNICOM 123.0

WASHINGTON CENTER APP/DEP CON 132.025

RADIO AIDS TO NAVIGATION: NOTAM FILE FKN.

FRANKLIN (L) VORTAC 110.6 FKN Chan 43 N36°42.85' W77°00.74' 275° 22.8 NM to fld. 90/09W.

NDB (MHW) 261 ELQ N36°37.08' W77°25.53' 336° 5.0 NM to fld. NOTAM FILE DCA.

ILS 108.75 I-EMV Rwy 33. Localizer only.

FALLS CHURCH N38°54.20' W77°10.50'
 RCO 122.6 122.2 (LEESBURG RADIO)

WASHINGTON
COPTER
 L-29E, 34F

FALWELL (See LYNCHBURG)

FARMVILLE RGNL (FVX) 4 NW UTC-5(-4DT) N37°21.45' W78°26.27' **WASHINGTON**
 416 B S2 FUEL 100LL, JET A NOTAM FILE FVX L-36H
RWY 03-21: H4400X75 (ASPH) S-12.5 MIRL IAP
 RWY 03: PAPI(P2L)—GA 3.0° TCH 52'. Tree.
 RWY 21: REIL, PAPI(P2L)—GA 3.0° TCH 52'. Trees.

AIRPORT REMARKS: Attended 1330–2200Z‡. Deer on and in vicinity of apt. Possible unmanned aerial vehicle operating 5 NM radius Farmville Apt 3000' AGL and blo. Rwy 03-21 MIRL preset low ints; to increase ints ACTIVATE—CTAF.

WEATHER DATA SOURCES: AWOS-3 132.725 (434) 392-9718.

COMMUNICATIONS: CTAF/UNICOM 122.8

② **WASHINGTON CENTER APP/DEP CON** 135.4

GCO 135.075 (WASHINGTON CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

FLAT ROCK (H) VORTAC 113.3 FAK Chan 80 N37°31.71' W77°49.69' 257° 30.9 NM to fld. 460/06W.

NDB (MHW) 367 FVX N37°21.18' W78°26.25' at fld. NOTAM FILE FVX. Unmonitored when apt unattended.

FELKER AAF (FORT EUSTIS) (FAF)(KFAF) A O N UTC-5(-4DT) N37°07.95' W76°36.53' **WASHINGTON**
 11 B TPA-See Remarks NOTAM FILE DCA Not insp.
RWY 14-32: H3025X75 (ASPH) PCN 13 F/B/Y/T HIRL
 RWY 14: ODALS. PVASI(PSIL). Rgt tfc. **RWY 32:** PVASI(PSIL).

L-34E, 35D, 36H
 DIAP

MILITARY SERVICE: LGT ACTIVATE HIRL RWY 14-32, PSIL Rwy 14 and Rwy 32-CTAF. ODALS Rwy 14 controlled by twr.

JASU 2(AGPU) **FUEL J8. TRAN ALERT** Svc avbl Mon-Fri 1100-2100Z‡ except Federal holidays.

MILITARY REMARKS: Base OPS Mon-Fri 1200-2200Z‡ except holidays, DSN 826-3588/2584,

C757-878-3398/3588. **RSTD** Acft entering from south-southeast maximum altitude 500' due to instrument apch into Newport News/Williamsburg Arpt. No hazardous Cargo Area avbl. **CAUTION** Deer and bird hazard. No overflight main post. Eagle Management Area 1 NM south AER 32 at east shore James River and Morrison Creek. Avoid over flight blo 1000' and 750' horizontally. No fly area 1.6 NM SE Rwy 32 to include entire peninsula. **TFC PAT** TPA-Fixed wing 999(988), rgt tfc Rwy 14. Rotary wing 499(488). **MISC** Wx forecast on duty Mon-Fri 1030-0400Z‡ except holidays. C757-878-5300, DSN 826-5300, (fax) DSN 826-2817. Remote briefing avbl from 15 OWS Scott AFB, IL, DSN 576-9755/9702, C618-256-9755/9702, (fax) DSN 576-4855
<http://ows.scott.af.mil>. Wx obsn avbl 24 hrs at <http://160.138.118.174/pv/localtop.htm> or C757-878-5314. Supplemented Wx obsn avbl as rqr 1100-0400Z‡ Mon-Fri exp exc federal holidays. Prevailing visibility may not be representative of entire airfield due to tree/bldg obstruction ½ SM NW-NE, ¼ to ¾ SM all other quads on auto obsn. Wind speeds may not be representative of entire airfield due to bldg obstruction to NE. RVR reporting capabilities not avbl. ATC will assist in cooperative wx watch (CWW) by notifying forecaster of unreported wx conditions. When twr and/or surface visibility is blo 4 SM, the lesser value is reported as prevailing during supplemented wx obsn. FAA Leesburg FSS C800-992-7433. Heli-deck marking located north of and adjacent to the approach of Rwy 14.

COMMUNICATIONS: CTAF 126.3

(R) NORFOLK APP/DEP CON 125.7 335.625

TOWER 126.3 269.25 (Mon-Fri 1200-0400Z‡ except Federal holidays) **GND CON** 121.35 229.4

PMSV METRO 134.1 (Monitored Mon-Fri 1000-2200Z‡ except holidays. Maximum range 30 NM.)

BASE OPS 134.1

AIRSPACE: CLASS D svc Mon-Fri 1200-0400Z‡, except Federal holidays, other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

NDB (MHW) 226 FAF N37°08.33' W76°37.11' at fld. Unmonitored when twr clsd. Unusable byd 20 NM.

FLAT ROCK N37°31.71' W77°49.69' NOTAM FILE DCA.

WASHINGTON

(H) **VORTAC** 113.3 FAK Chan 80 122° 16 NM to Chesterfield Co. 460/06W.

H-10H, L-36H

 VOR portion unusable:

 111°-169° byd 30 NM

 111°-169° blo 2600'

 274°-337°

RCO 122.1R 113.3T (LEESBURG RADIO)

FOREST

NEW LONDON (W90) 6 SW UTC-5(-4DT) N37°16.31' W79°20.15'

CINCINNATI

L-26J

849 S2 **FUEL** MOGAS, 100LL NOTAM FILE DCA

RWY 17-35: H3164X40 (ASPH)

 RWY 17: Thld dsplcd 115'. Ground.

 RWY 35: Trees.

AIRPORT REMARKS: Attended 1430-2300Z‡. Parachute Jumping.

 Ultraigt acft on and invof arpt. Rwy used as drag strip on Sundays summer months. NOTAMED when arpt CLOSED.

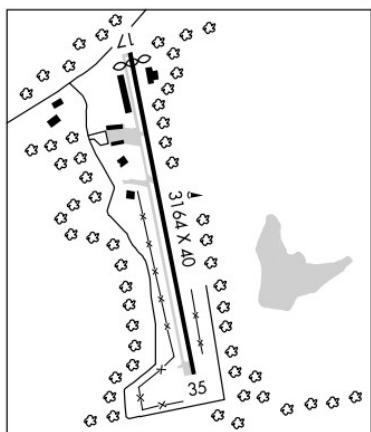
COMMUNICATIONS: CTAF/UNICOM 122.8

(R) **ROANOKE APP/DEP CON** 125.47 (East of LYH VORTAC) 135.0 (West of LYH VORTAC)

RADIO AIDS TO NAVIGATION: NOTAM FILE LYH.

LYNCHBURG (L) VORTAC 109.2 LYH Chan 29 N37°15.28'

 W79°14.19' 287° 4.9 NM to fld. 880/05W. **HIWAS**.



FORT A P HILL (See A P HILL)

FORT BELVOIR (See DAVISON AAF)

FORT LEE HELIPAD NR 3 (VA39) A O S UTC-5(-4DT) N37°15.01' W77°19.98'

WASHINGTON

100 NOTAM FILE DCA

L-36H

HELIPAD 36: H40X40 (CON)

DIAP

MILITARY SERVICE: LGT Key 126.2 3 times for boundary lgt, auto turn-off after 15 min.

MILITARY REMARKS: RSTD 24 HR PPR DSN 687-6421. CAUTION Parachute jumping 2 NM NW. Small arms range 1 NM NW. Avoid overflight of asph compound 1 NM WNW. MISC Avoid overflight of national park and base housing areas adjacent to Fort Lee Reservation. Make advisory of ldg and tkf on 126.2.

COMMUNICATIONS:

(R) POTOMAC APP/DEP CON 126.4 282.375 MEDIVAC 32.5 (KENNER)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

HOPEWELL (L) VORTAC 112.0 HPW Chan 57 N37°19.73' W77°06.96' 252° 11.4 NM to fld. 70/6W. HIWAS.

FORT EUSTIS (See FELKER AAF)

FRANKLIN N36°42.85' W77°00.74' NOTAM FILE FKN.

WASHINGTON

(L) VORTAC 110.6 FKN Chan 43 109° 5.3 NM to Franklin Muni-John Beverly Rose.

H-9C, H-10H, L-35C, 36H

90/09W.

VOR portion unusable:

090°-119° byd 18 NM blo 2000'

119°-128° byd 10 NM

129°-134° byd 33 NM

135°-148°

DME unusable:

90°-139°

RCO 122.1R 110.6T (LEESBURG RADIO)

FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN) 2 NE UTC-5(-4DT)

WASHINGTON

L-35C, 36H

IAP

N36°41.89' W76°54.23'

41 B S4 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE FKN

RWY 09-27: H4977X100 (ASPH-GRVD) MIRL

RWY 09: PAPI(P2L)—GA 3.0°. TCH 46'. Brush.

RWY 27: PAPI(P2L)—GA 3.0°. TCH 40'. Tree.

AIRPORT REMARKS: Attended 1300-2200Z#. Possible tfc from the Southampton Memorial Helipad 2 NM west of arpt. Deer on and invof arpt. Drainage ditches next to rwy and twys. ACTIVATE MIRL Rwy 09-27—CTAF. TPA—841(800) light acft, 1541(1500) heavy acft.

WEATHER DATA SOURCES: AWOS-3 124.675 (757) 562-8765. Ceiling unreliable.

COMMUNICATIONS: CTAF/UNICOM 122.8

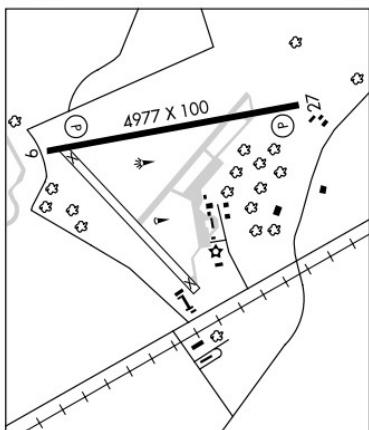
(R) NORFOLK APP/DEP CON 127.9

GCO 135.075 (NORFOLK CLNC) GCO unreliable indef.

RADIO AIDS TO NAVIGATION: NOTAM FILE FKN.

FRANKLIN (L) VORTAC 110.6 FKN Chan 43 N36°42.85'

W77°00.74' 109° 5.3 NM to fld. 90/9W.



GALAX/HILLSVILLE**TWIN CO**

(HLX) 7 NE UTC-5(-4DT) N36°45.97' W80°49.41'

2693 B S6 FUEL 100LL, JETA NOTAM FILE HLX

RWY 01-19: H4204X75 (ASPH) S-12.5 MIRL 1.2% up S

RWY 01: REIL. PAPI(P4L)—GA 3.0° TCH 21'. Trees.

RWY 19: REIL. PAPI(P2L)—GA 3.0° TCH 39'. Pole.

AIRPORT REMARKS: Attended irregularly. Self-svc, credit card fuel avbl 24 hrs. Deer on and invof arpt. Rwy 19 tree 76' above rwy end, 1000' from rwy end, 344' right. MIRL Rwy 01-19 preset off to ACTIVATE and increase intensity and ACTIVATE REIL Rwy 01 and Rwy 19—CTAF. PAPI Rwy 01 and Rwy 19 opr continuously.

WEATHER DATA SOURCES: AWOS-3 118.375 (276) 728-5897.**COMMUNICATIONS:** CTAF/UNICOM 122.8

ROANOKE APP/DEP CON 126.0

GCO 135.075 (ROANOKE CLNC)

RADIO AIDS TO NAVIGATION: NOTAM FILE PSK.

PULASKI (H) VORTAC 116.8 PSK Chan 115 N37°05.26'

W80°42.77' 202° 20 NM to fld. 2120/06W. HIWAS.

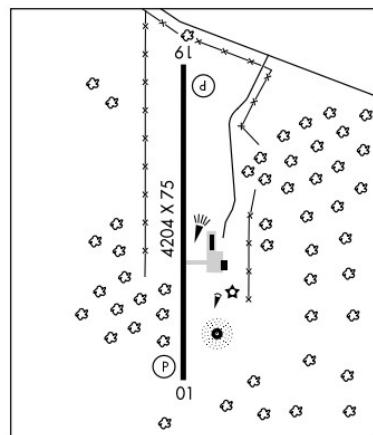
HILLSVILLE NDB (MHW) 269 HLX N36°45.74' W80°49.32'

at fld. NOTAM FILE HLX. Unusable byd 10 NM. Unmonitored.

CINCINNATI

L-261

IAP

**GLADE SPRING** N36°49.51' W82°04.74' NOTAM FILE DCA.(L) VOR/DME 110.2 GZG Chan 39 045° 19.7 NM to Tazewell Co. 4200/02W. HIWAS.
VOR portion unusable 351°-004° byd 15 NM blo 8000'.

CINCINNATI

H-9B, 12G, L-26H

RCO 122.1R 110.2T (LEESBURG RADIO)

GORDONSVILLE N38°00.82' W78°09.18' NOTAM FILE DCA.

WASHINGTON

(H) VORTAC 115.6 GVE Chan 103 002°8.6 NM to Gordonsville Muni. 382/06W.
HIWAS.

H-10H, 12H, L-34E, 36H

DME unusable:

090°-095°

318°-324°

156°-169° byd 18 NM

RCO 122.1R 115.6T (LEESBURG RADIO)

GORDONSVILLE MUNI (GVE) 3 NE UTC-5(-4DT) N38°09.36' W78°09.95'

WASHINGTON

454 B S2 FUEL 100LL NOTAM FILE DCA

RWY 05-23: H2300X40 (ASPH) S-12.5 MIRL 0.5% up SW

RWY 05: APAP(PNIR). Tree.

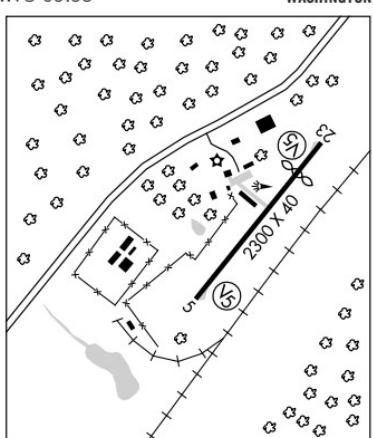
RWY 23: APAP(PNIR). Thld dsplcd 440'. Tree.

AIRPORT REMARKS: Unattended. Rwy 05-23 old crackseal six inches wide in places, very soft. Rotating bcn OTS indef. ACTIVATE MIRL Rwy 05-23—CTAF.

WEATHER DATA SOURCES: HIWAS 115.6 GVE.**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.1R 115.6T (LEESBURG RADIO)

(R) POTOMAC APP/DEP CON 132.85



GRUNDY MUNI (GDY) 3 SW UTC-5(-4DT) N37°13.94' W82°07.50'

2304 B NOTAM FILE DCA

RWY 04-22: H2256X60 (ASPH) S-7 MIRL

RWY 04: APAP(PNIL). Tree.

RWY 22: APAP(PNIL). Tree.

AIRPORT REMARKS: Unattended. Wildlife invof arpt. Pay phone at arpt 276-935-8022. ACTIVATE MIRL Rwy 04-22—CTAF; high ints only.

COMMUNICATIONS: CTAF/UNICOM 123.0

(R) INDIANAPOLIS CENTER APP/DEP CON 126.575

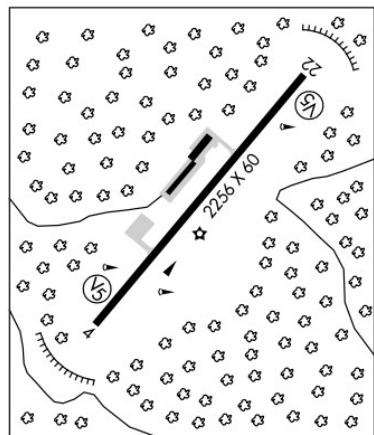
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

GLADE SPRING (L) VOR/DME 110.2 GZG Chan 39 N36°49.51' W82°04.74' 357° 24.5 NM to fld. 4200/02W. HIWAS.

CINCINNATI

L-26H

IAP



HAMPTON ROADS EXECUTIVE (See NORFOLK)

HANOVER CO MUNI (See RICHMOND/ASHLAND)

HARCUM N37°26.92' W76°42.68' NOTAM FILE DCA.

(L) **VORTAC** 108.8 HCM Chan 25 338° 5.0 NM to Middle Peninsula Rgnl. 8/07W. VOR portion unusable 056°–095° below 2000', 275°–300° below 2000'.

WASHINGTON
H-10H, 12H, L-34E, 36H

RCO 122.1R 108.8T (LEESBURG RADIO)

HENRY N37°07.97' W76°29.59' NOTAM FILE DCA.

NDB (MHW) 375 PJS at Newport News/Williamsburg Intl.

WASHINGTON
L-34E, 35D, 36H

HILLSVILLE N36°45.74' W80°49.32' NOTAM FILE HLX.

NDB (MHW) 269 HLX at Twin Co. Unusable byd 10 NM. Unmonitored.

CINCINNATI
L-26I

HOLSTON MOUNTAIN, TN N36°26.22' W82°07.78' NOTAM FILE TRI.

(L) **VORTAC** 114.6 HMV Chan 93 021° 15.7 NM to Virginia Highlands. 4321/04W.
RCO 122.1R 114.6T (NASHVILLE RADIO)

CINCINNATI
H-9B, L-26I

HOPEWELL N37°19.73' W77°06.96' NOTAM FILE DCA.

(L) **VORTAC** 112.0 HPW Chan 57 003° 10.5 NM to New Kent Co. 70/06W.
RCO 122.1R 112.0T (LEESBURG RADIO)

WASHINGTON
H-10H, 12H, L-34E, 36H

HOT SPRINGS**INGALLS FLD**

(HSP) 3 S UTC-5(-4DT) N37°57.09' W79°50.03'

3793 B FUEL 100LL, JET A NOTAM FILE HSP

RWY 07-25: H5600X100 (ASPH-PFC) S-65, D-160, 2S-175 HIRL 0.5% up SW

CINCINNATI

H-10H, 12H, L-25H

IAP

RWY 07: PAPI(P4R)—GA 3.0°TCH 46'. Ground.

RWY 25: REIL, PAPI(P4L)—GA 3.0°TCH 58'.

AIRPORT REMARKS: Attended Nov-Mar 1400-2200Z‡, Apr-Oct Mon-Fri

1300-2300Z‡ Sat-Sun 1300-2300Z‡. Wildlife, including bear on and invof arpt. Be advised low pass to check/clear wildlife when arpt unattended. ACTIVATE HIRL Rwy 07-25, PAPI Rwy 07 and 25, REIL Rwy 25 and twy lghts—CTAF. Ldg fee. Ldg fee waived for fuel purchase multi engine aeft only.

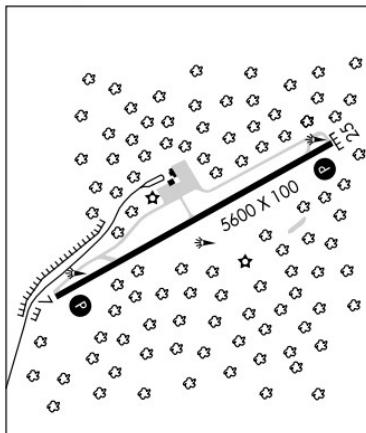
WEATHER DATA SOURCES: AWOS-3 118.8 (540) 839-5974.**COMMUNICATIONS:** CTAf/UNICOM 123.0⑧ **WASHINGTON CENTER APP/DEP CON** 134.4**AIRSPACE:** CLASS E svc 1500-2300Z‡ other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE DCA.

MONTEBELLO (L) VOR/DME 115.3 MOL Chan 100 N37°54.03'

W79°06.41' 280° 34.7 NM to fid. 3460/05W.

ILS 108.7 I-HSP Rwy 25. ILS unmonitored

0200-1230Z‡. GS unusable bld 4030'.

**HUMMEL FLD** (See SALUDA)**INGALLS FLD** (See HOT SPRINGS)**INGLE** N36°50.43' W76°15.08' NOTAM FILE ORF.

NDB (LOM) 329 OR 046°4.1 NM to Norfolk Intl.

JONES N36°36.87' W78°03.19' NOTAM FILE AVC.

NDB (MHW) 373 AEA 008°4.4 NM to Mecklenburg-Brunswick Rgnl.

WASHINGTON

L-36G

JONESEVILLE**LEE CO** (ØVG) 5 SW UTC-5(-4DT) N36°39.25' W83°13.07'

1411 B TPA-2411(1000) NOTAM FILE DCA

CINCINNATI

RWY 07-25: H5000X75 (ASPH) S-30 MIRL 0.9% up NE

H-9B, 12G, L-25B

RWY 07: REIL, PAPI(P2L)—GA 3.0° TCH 40'. Tree. RWY 25: REIL, PAPI(P2L)—GA 3.0° TCH 40'. Tree.

AIRPORT REMARKS: Attended on call. After hours call 276-346-2075 or 276-346-3051. ACTIVATE MIRL Rwy 07-25, PAPI Rwy 07 and Rwy 25, and REIL Rwy 07 and Rwy 25—CTAF.**COMMUNICATIONS:** CTAf 122.9⑧ **ATLANTA CENTER APP/DEP CON** 127.55**RADIO AIDS TO NAVIGATION:** NOTAM FILE LOU.

HAZARD (L) VOR/DME 111.2 AZQ Chan 49 181° 44.2 NM to fid. 1247/04W. DME unusable bld 25 NM bld 4500'.

KENBRIDGE**LUNENBURG CO**

(W31) 3 W UTC-5(-4DT) N36°57.61' W78°11.10'

526 B NOTAM FILE DCA

RWY 02-20: H3000X50 (ASPH-AFSC) S-12.5 LIRL

RWY 02: APAP(PNIL)—GA 5.0° TCH 26'. Tree.

RWY 20: APAP(PNIL)—GA 5.0° TCH 26'. Tree.

AIRPORT REMARKS: Unattended. Deer on and invov arpt.

COMMUNICATIONS: CTAF/UNICOM 122.7

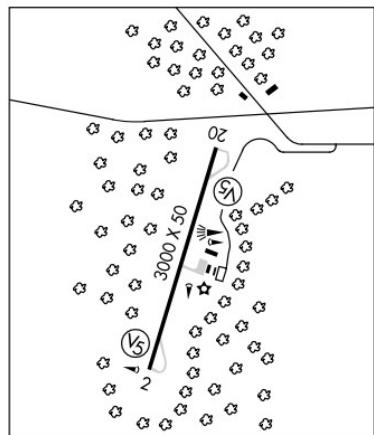
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

LAWRENCEVILLE (L) VORTAC 112.9 LVL Chan 76 N36°49.08'

W77°54.18' 310°16.0 NM to fld. 350/08W.

WASHINGTON

L-366

**LAKE ANNA** (See BUMPASS)**LAKE COUNTRY RGNL** (See CLARKSVILLE)

LANGLEY AFB (LFI)(KLFI) AF (NASA A) 3 N UTC-5(-4DT) N37°04.97' W76°21.63' **WASHINGTON**
 11 B TPA-See Remarks NOTAM FILE DCA Not insp.
RWY 08-26: H10000X150 (CONC-GRVD) PCN 45 R/C/W/T HIRL
RWY 08: ALSF1. PAPI(P4L). **RWY 26:** MALSR. REIL. PAPI(P4L).

H-10I, 12I, L-35D
 IAP, DIAP, AD

ARRESTING GEAR/SYSTEM

RWY 08: ← HOOK E5 (55' OVRN) HOOK BAK-12B(B) (1100')

HOOK BAK 12-B(B) (1000') HOOK E5 (55' OVRN) → **RWY 26**

MILITARY SERVICE: LGT Rwy 08-26 thld lgt gated, mid 70' inoperative/removed. **A-GEAR** E5 active rwy dep end. BAK-12B(B) pendant cable always in place. BAK-12B extension. **JASU** 2(M32A-60) 2(MC11) 4(A/M 32A-86)

FUEL J8. Expect up to 1 hr delay. **FLUID SP LHOX LOX** **OIL** 0-133-148-156 **SOAP** **TRAN ALERT** Opr weekdays 1030-0430Z‡, weekends and holidays 1200-0100Z‡. Follow Me svc avbl upon req. Expect progressive taxi to park. Fleet svc truck avbl but limited to VIP C-9, C-12, C-20, C-21, UC-35, VC-135 and E-4B (DV) acft only.

MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Information. **RSTD** PPR ctc BASE OPS 1030-0430Z‡ DSN 574-2504, C757-764-2504. Only 1 fixed wing acft authorized from 1300-1400Z‡. ACC RSRS applied to ACC acft only. Transport/Distinguished Visitor acft ctc Base OPS 20 minutes prior ldg. **CAUTION** Intensive IFR and VFR high performance fighter tfc within the Class D Airspace: Extensive uncontrolled general aviation tfc blo 3000' over James River and Chesapeake Bay. Dep tfc do not exceed 1000' on climbout until dep end of rwy. Laser lgt beam haz to direct visual obsn will be conducted at NASA Langley Research Center within 1/2 NM radius of 37° 06.3'N 76° 22.7'W. Strong caution is advised. Wx observation site limited 080°-250° due to building. ATC will relay twr prevailing visibility, sector visibility, local PIREP's or an occurrence of previously unreported wx conditions that could affect ops to wx flight. Wind shear conditions may exist on Rwy 26 through short final and touchdown, that are prevalent, undetectable and often unreported. Increased potential for hydroplaning due to excessive rubber build-up. Airfield grass cutting conducted from Mar-Nov, expect increased bird activity inofv mowers. **TFC PAT TPA-Overhead** 3000(2989) at 5 DME descending to 1500' by 3 DME, rgt break Rwy 26, left break Rwy 08. Rectangular 1000(989) rgt tfc Rwy 26, left tfc Rwy 08. **NS ABMT** Quiet hr weekdays 0330-1100Z‡, weekends and holidays 0330-1300Z‡, waivers DSN 574-5411. **MISC** Afld manager DSN 574-2508. DD Form 1801 rqr 90 min prior to estimated time of departure. Rwy 08-26 grooved. ACC fighter acft expect reduced rwy separation: Day/VFR, similar acft 3000', dissimilar type acft 6000'. Ngt 6000' all acft. Tran acft notify twr on initial ctc if reduced rwy separation is not desired. Afld Ops does not have ability to store COMSEC. Ctc Command Post DSN 574-5411, C757-764-5411 for COMSEC storage. **A Park**, refuel and maintenance avbl on AF ramp. **NASA** All inbound to NASA side must coordinate in advance with NASA Flight Svc Ops DSN 574-3070, C757-864-3887. Svc not avbl for non-NASA acft. Twy J can only be used during daylt and VFR conditions as it does not have twy edge lghts and is restricted to acft with total wingspan of 80' or less and 100,000 lbs or less gross weight.

COMMUNICATIONS: SFA ATIS 270.1 PTD 141.75 376.2

(R) NORFOLK APP/DEP CON 126.05 370.925 (010°-080°) 127.9 269.42 (180°-310°) 124.9 379.1 (311°-009°)

TOWER 125.0 253.5 **GND CON** 121.7 275.8 **CLNC DEL** 118.85 257.625

CONSOLIDATED COMD POST (Raymond 16) 251.25 311.0 (Have quick timing avbl 287.45.)

PMSV METRO 239.8(Wx DSN 574-5908. Alternate PMSV is McGuire AFB. Full svc avbl Mon-Fri 1200-2200Z‡.

Remote briefing svc avbl 9 OWS Shaw AFB DSN 965-0939 thru 0943, C 803-895-0939.

NASA OPS 123.375 310.4

RADIO AIDS TO NAVIGATION: NOTAM FILE LFI.

(L) TACAN Chan 70 LFI (112.3) N37°05.13' W76°21.56' at fid. 11/10W. No NOTAM MP Tue and Thu 1100-1300Z‡ and 2300-0200Z‡.

TACAN unusable:

130°-150° byd 22 NM blo 2,000'

305°-184° byd 9 NM blo 7,000'

170°-180° byd 27 NM blo 2,000'

318°-305° byd 30 NM blo 3,000'

ILS 109.9 I-LFI Rwy 08. GS unusable for coupled apch blo 750'. No NOTAM MP Mon, Wed, Fri 1100-1300Z‡ and 2300-0200Z‡.

ILS 109.9 I-ABM Rwy 26. No NOTAM MP Mon, Wed, and Fri 1100-1300Z‡ and 2300-0200Z‡.

LAWRENCEVILLE/BRUNSWICK MUNI (LVL) 3 E UTC-5(-4DT) N36°46.37' W77°47.66'

329 B FUEL 100LL NOTAM FILE DCA

RWY 18-36: H3020X50 (ASPH) S-12.5 MIRL 0.6% up S.

RWY 18: Trees. **RWY 36:** Trees.

RWY 06-24: 1890X70 (TURF) 1.7% up NE

RWY 06: Tree. **RWY 24:** Tree.

AIRPORT REMARKS: Attended 1300-2200Z#. Rwy 06-24 tmpry CLOSED due to obstructions. Deer on and invof arpt. Rwy 06-24 marked with cones. ACTIVATE MIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.1R 112.9T (LEESBURG RADIO)

WASHINGTON APP/DEP CON 118.75

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

(L) VORTAC 112.9 LVL Chan 76 N36°49.08'
W77°54.18' 125° 5.9 NM to fld. 350/08W.

VOR portion unusable:

090° byd 20 NM

090° blo 7000'

091°-105°

106° byd 27 NM

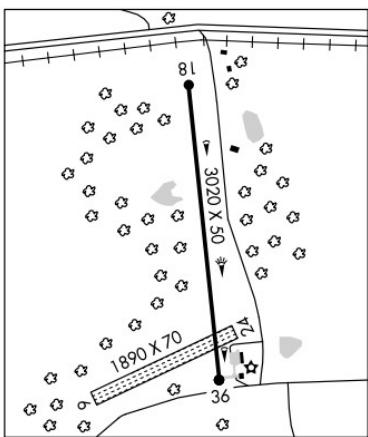
106° blo 7500'

107°-170°

171°-280° blo 6000'

201°-325° byd 17 NM blo 9000'

326°-089°



LEE CO (See JONESVILLE)

LEESBURG EXECUTIVE (JYO) 3 S UTC-5(-4DT) N39°04.68' W77°33.45'

389 B S4 FUEL 100LL, JET A OX 4 TPA—1199(810) LRA NOTAM FILE JYO

RWY 17-35: H5500X100 (ASPH) S-30, D-70 HIRL

WASHINGTON
COPTER
H-10H, 12I, L-29E, 34F, A
IAP

RWY 17: ODALS(NSTD). REIL. PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 35: REIL. PAPI(P4R)—GA 3.0° TCH 32'. Trees.

AIRPORT REMARKS: Attended 1300-0100Z#. For svc after hrs call 703-777-1540. For fuel and other line svcs contact arpt ops on frequency 132.0. Birds and deer on and invof arpt. Helicopter activity. Calm wind use Rwy 17. Ramp fence southwest side ramps lead-in lines on west ramp NA. PAEW on and invof arpt. Rwy 17 NSTD ODALS, 3 lgt configuration. ACTIVATE HIRL Rwy 17-35, ODALS Rwy 17, REIL Rwy 17 and Rwy 35 and PAPI Rwy 17 and Rwy 35—CTAF. Omni-directional REIL Rwy 17 and Rwy 35. US Customs avbl on req Mon-Fri 703-661-3632 extension 108/119 prior to 2200Z# the preceding workday; after 2200Z# or weekends 1-800-973-2867.

WEATHER DATA SOURCES: AWOS-3 125.225 (703) 777-3781.

COMMUNICATIONS: CTAF/UNICOM 122.975

RCO 122.6 122.2 (LEESBURG RADIO)

(R) POTOMAC APP/DEP CON 126.1 CLNC DEL 118.55 135.075

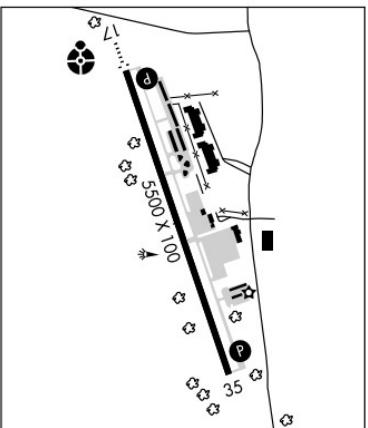
RADIO AIDS TO NAVIGATION: NOTAM FILE IAD.

ARMEL (L) VORTAC 113.5 AML Chan 82 N38°56.08'

W77°28.00' 342° 9.6 NM to fld. 297/08W.

ILS/DME 111.75 I-JYO Chan 54Y Rwy 17. LOC only. LOC/DME unmonitored when arpt unattended.

COMM/NAV/WEATHER REMARKS: AWOS-3 Visibility/ceiling unreliable. Wind unreliable.



LINDEN N38°51.26' W78°12.33' NOTAM FILE DCA.

(L) VORTAC 114.3 LDN Chan 90 335° 4.4 NM to Front Royal-Warren Co. 2440/06W.

DME portion unusable:

115°-150° byd 20 NM blo 3500'

150°-155° byd 20 NM blo 4000'

155°-175° byd 20 NM blo 4500'

RCO 122.1R 114.3T (LEESBURG RADIO)

WASHINGTON
COPTER
H-10H, 12H, L-29D, 34E, A

175°-200° byd 20 NM blo 5000'
200°-225° byd 20 NM blo 5500'

LONESOME PINE (See WISE)

LOUISA CO/FREEMAN FLD (LKU) 2 SE UTC-5(-4DT) N38°00.59' W77°58.21'

493 B S4 FUEL 100LL, JET A NOTAM FILE LKU
RWY 09-27: H4300X100 (ASPH) S-12.5 MIRL 0.6% up E

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree. Rgt tfc.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree.

AIRPORT REMARKS: Attended Mon-Sat 1330-2200Z‡. Sun and holidays 1500-2200Z‡. Parachute Jumping. Deer on and invof arpt. MIRL Rwy 09-27 preset low ints, to increase ints and ACTIVATE REIL Rwy 09 and 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.475 (540) 967-1983.

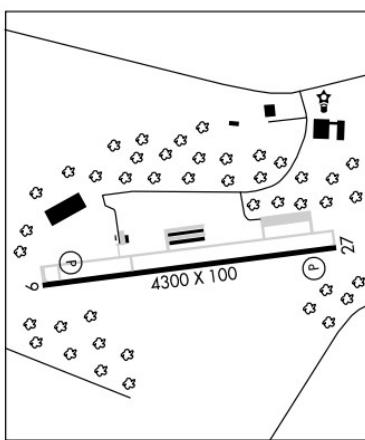
COMMUNICATIONS: CTAf/UNICOM 122.725

(R) POTOMAC APP/DEP CON 132.85

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

GORDONSVILLE (H) VORTAC 115.6 GVE Chan 103 N38°00.82'
W78°09.18' 097° 8.7 NM to fld. 382/06W. HIWAS.

ILS 108.55 I-LKU Rwy 27. LOC only. Unmonitored.



LUNENBURG CO (See KENBRIDGE)

LURAY CAVERNS (W45) 2 W UTC-5(-4DT) N38°40.02' W78°30.04'

902 B S2 FUEL 100LL NOTAM FILE DCA
RWY 04-22: H3125X75 (ASPH) S-12 MIRL

RWY 04: APAP(PNIl)—GA 3.0°. Tree. RWY 22: APAP(PNIl)—GA 3.0°. Antenna. Rgt tfc.

AIRPORT REMARKS: Attended 1300-2300Z‡. Deer and birds on and invof arpt. Taxi on hard surfaces only. ACTIVATE MIRL Rwy 04-22—CTAF.

COMMUNICATIONS: CTAf/UNICOM 122.8

(R) WASHINGTON CENTER APP/DEP CON 133.2

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

LINDEN (L) VORTAC 114.3 LDN Chan 90 N38°51.26' W78°12.33' 237° 17.8 NM to fld. 2440/06W.

CAVERNS NDB (MHW) 245 LUA N38°41.97' W78°28.30' 224° 2.4 NM to fld. Unmonitored when arpt unattended. Unusable 209°-049° byd 15 NM; 050°-208° byd 10 NM.

LYNCHBURG

FALWELL (W24) 3 SE UTC-5(-4DT) N37°22.68' W79°07.34'

939 S4 FUEL 100LL, JET A OX 1, 3, 4 TPA—1739(800) NOTAM FILE DCA

RWY 10-28: H2932X50 (ASPH) MIRL 4.7% up W
RWY 10: Tree. RWY 28: TRCV(TRIL).

AIRPORT REMARKS: Attended Apr-Oct 1200-0000Z‡, Nov-Mar 1200-2300Z‡. Land Rwy 28 (west) tkf Rwy 10 (east).

WEATHER DATA SOURCES: HIWAS 109.2 LYH.

COMMUNICATIONS: CTAf/UNICOM 123.0

(R) ROANOKE APP/DEP CON 125.47 (East of LYH VORTAC) 135.0 (West of LYH VORTAC)

RADIO AIDS TO NAVIGATION: NOTAM FILE LYH.

LYNCHBURG (L) VORTAC 109.2 LYH Chan 29 N37°15.28' W79°14.19' 042° 9.2 NM to fld. 880/05W.
HIWAS.

CINCINNATI

L-26J, 36G

IAP

LYNCHBURG RGNL/PRESTON GLENN FLD (LYH) 5 SW UTC-5(-4DT)

CINCINNATI

N37°19.52' W79°12.03'

H-10H, 12H, L-26J, 36G

938 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE LYH

IAP, AD

RWY 04-22: H7100X150 (ASPH-GRVD) S-90, D-108, 2D-170

PCN 29 F/A/X/T HIRL 0.6% up NE

RWY 04: MALSR. PAPI(P4L)—GA 3.0° TCH 55'.**RWY 22:** REIL. PAPI(P4L)—GA 3.0° TCH 45'. Ground.**RWY 17-35:** H3386X75 (ASPH) S-25, D-35, 2D-55 MIRL**RWY 17:** REIL. PAPI(P2L)—GA 4.0° TCH 20'.**RWY 35:** REIL. PAPI(P2L)—GA 4.0° TCH 20'.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 04:** TORA-7100 TODA-7100 ASDA-6800 LDA-6800**RWY 22:** TORA-7100 TODA-7100 ASDA-7100 LDA-7100**AIRPORT REMARKS:** Attended 1000-0459Z‡. Rwy 17-35 CLOSED to air carrier and acft over 12,500 lbs. PPR 12 hrs for unscheduled acft ops with more than 30 passenger seats. Call ARFF

434-582-1157. Twy G uncontrolled—not visible from tower. Twy G CLOSED to air carrier and acft over 12,500. Birds and other wildlife on and in vnof arpt. Rwy 17-35 CLOSED to air carrier or acft over 12,500 pounds without PPR. When twr clsd ACTIVATE HIRL Rwy 04-22; MALSR Rwy 04 and twy lghts—CTAF. MIRL Rwy 17-35; REIL Rwy 17 and Rwy 35 and PAPI Rwy 17 and Rwy 35 unavbl when twr clsd.

WEATHER DATA SOURCES: ASOS 119.8 (434) 239-0025

HIWAS 109.2 LYH. LAWRS.

COMMUNICATIONS: CTAF 127.65 ATIS 119.8 UNICOM 122.95

LYNCHBURG RCO 122.1R 109.2T (LEESBURG RADIO)

(R) ROANOKE APP/DEP CON 125.47 (East of LYH VORTAC) 135.0 (West of LYH VORTAC)

TOWER 127.65 (1130-0330Z‡) GND CON 121.9

AIRSPACE: CLASS D svc 1130-0330Z‡ other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LYH.

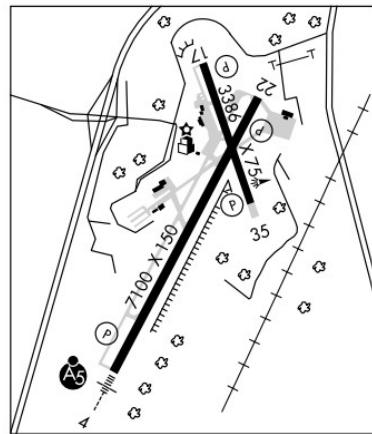
(L) VORTAC 109.2 LYH Chan 29 N37°15.28' W79°14.19' 027° 4.7 NM to fld. 880/05W. HIWAS.

VOR unusable 236°-241° within 20 NM bld 8000'.

VOR unusable 253°-257° within 20 NM bld 8000'.

BOJAR NDB (MHW/LOM) 385 LY N37°15.75' W79°14.60' 036° 4.4 NM to fld. NDB unmonitored when twr clsd.

ILS 110.1 I-LYH Rwy 04. Class IE LOM BOJAR NDB. ILS unmonitored when twr clsd.



MANASSAS RGNL/HARRY P DAVIS FLD

(HEF) 4 SW UTC-5(-4DT)

WASHINGTON

COPTER

N38°43.29' W77°30.93'

192 B S4 FUEL 100LL, JET A OX 1, 2, 4 TPA—See Remarks LRA
NOTAM FILE HEFH-10H, 12I, L-29E, 34E, 36I, A
IAP, ADRWY 16L-34R: H5700X100 (ASPH-GRVD) S-50, D-140 HIRL
RWY 16L: MALSR. REIL. PAPI(P4L)—GA 3.0° TCH 56'. Trees.

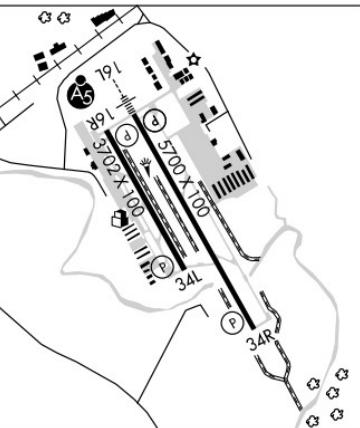
RWY 34R: REIL. PAPI(P4L)—GA 3.0° TCH 45'. Rgt tfc.. Tree.

RWY 16R-34L: H3700X100 (ASPH) S-12.5 MIRL

RWY 16R: REIL. PAPI(P2L)—GA 3.0° TCH 50'. Rgt tfc. Tree.

RWY 34L: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree.

AIRPORT REMARKS: Attended 1130–0330Z#. Birds and deer on and invof apt. Acft category C III or larger use Rwy 16L-34R and East ramp. Helicopter ops over residential areas blo 1000' should be avoided; ctc apt manager 703-361-1882. TPA—1200(1008) single engine and light twin acft, 1500(1308) med twin and turboprop acft, 1000(808) helicopter. When twr clsd ACTIVATE HIRL Rwy 16L-34R, MALSR Rwy 16L, MIRL Rwy 16R-34L and REIL Rwy 16L, Rwy 34R, Rwy 16R, Rwy 34L—CTAF. U.S. Customs avbl Mon-Sun 1000–0400Z#. Call Command Center 703-661-7100 for appointment.

**WEATHER DATA SOURCES:** AWOS-3 125.175 (703) 361-6160**COMMUNICATIONS:** CTAF 133.1 ATIS 125.175 (703) 361-6160

(R) POTOMAC APP/DEP CON 124.65

TOWER 133.1 (1130-0330Z#) GND CON 121.8

CLNC DEL 120.2 (When twr clsd POTOMAC CLNC DEL 120.2)

AIRSPACE: CLASS D svc effective 1130–0330Z# other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE IAD.

ARTEL (L) VORTAC 113.5 AML Chan 82 N38°56.08' W77°28.00' 199° 12.9 NM to fld. 297/08W.

TILLE NDB (LOM) 346 IA N38°50.83' W77°26.27' 216° 8.4 NM to fld.

ILS 109.1 I-HEF Rwy 16L.

MARION/WYTHEVILLE**MOUNTAIN EMPIRE**

(MKJ) 9 NE UTC-5(-4DT) N36°53.69' W81°21.00'

CINCINNATI

H-9B, 12H, L-26I

IAP

2558 B S4 FUEL 100LL, JET A NOTAM FILE MKJ

RWY 08-26: H5252X75 (ASPH) S-20 MIRL 1.1% up W

RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 26: REIL. PAPI(P2L)—GA 3.75° TCH 47'. Road.

AIRPORT REMARKS: Attended Apr-Oct Mon-Fri 1230–0100Z#, Sat

1300–0000Z#, Sun 1800–0000Z#, Nov-Mar Mon-Fri

1230–0000Z#, Sat 1300–0000Z#, Sun 1800–0000Z#. Located 9 NM NE Marion. MIRL Rwy 08–26 preset low ints, ACTIVATE higher ints—CTAF.

WEATHER DATA SOURCES: AWOS-3 123.875 (276) 686-6420.**COMMUNICATIONS:** CTAF/UNICOM 122.7

(R) ATLANTA CENTER APP/DEP CON 132.9

RADIO AIDS TO NAVIGATION: NOTAM FILE PSK.

PULASKI (H) VORTAC 116.8 PSK Chan 115 N37°05.26'

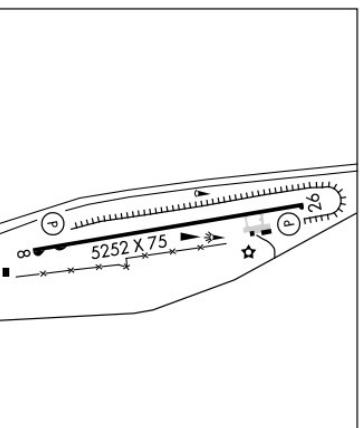
W80°42.77' 256° 32.7 NM to fld. 2120/06W. HIWAS.

SUZZE NDB (MHW/LOM) 335 MK N36°55.21' W81°14.60' 260°

5.4 NM to fld. NOTAM FILE MKJ. Unmonitored when apt unattended.

ILS 110.5 I-MKJ Rwy 26. LOM SUZZE NDB. (LOC only.)

LOC unmonitored when apt unattended.



MARTINSVILLE**BLUE RIDGE**

(MTV) 8 SW UTC-5(-4DT) N36°37.85' W80°01.10'
 941 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 NOTAM FILE MTV
RWY 12-30: H5002X100 (ASPH-GRVD) S-30, D-60 MIRL 0.6% up NW
 RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.
 RWY 30: REIL. ODALS. PAPI (P4L)—GA 3.0° TCH 40'. Tree.

AIRPORT REMARKS: Attended 1300-2300Z‡. Deer on and invof arpt.
 ACTIVATE MIRL Rwy 12-30, PAPI Rwy 12 and 30, REIL Rwy 12
 and Rwy 30, and ODALS Rwy 30—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.45 (276) 957-3784. OTS indef.
COMMUNICATIONS: CTAF/UNICOM 122.7

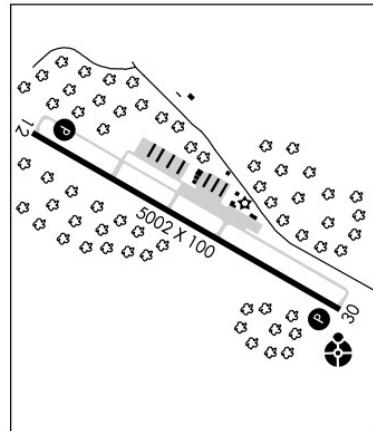
② **GREENSBORO APP/DEP CON** 124.35 **CLNC DEL** 124.85

RADIO AIDS TO NAVIGATION: NOTAM FILE GSO.

GREENSBORO (H) VORTAC 116.2 GSO Chan 109 N36°02.74'
 W79°58.58' 360° 35.1 NM to fld. 879/03W. **HIWAS.**

BALES NDB (MHW/LOM) 396 UV N36°35.39' W79°55.04' 304°
 5.5 NM to fld. NOTAM FILE MTV. Unmonitored when arpt
 unattended.

ILS/DME 111.3 I-UVM Chan 50 Rwy 30. LOC only.
 LOM BALES NDB. LOC/DME unmonitored when arpt unattended.

**MC LAUGHLIN SPB** (See CHESTER)**MECKLENBURG-BRUNSWICK RGNL** (See SOUTH HILL)**MELFA**

ACCOMACK CO (MFV) 1 W UTC-5(-4DT) N37°38.81' W75°45.66'
 47 B FUEL 100LL JET A+ TPA—See Remarks NOTAM FILE MFV

RWY 03-21: H5000X100 (ASPH) S-26 MIRL

RWY 03: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree.

RWY 21: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

AIRPORT REMARKS: Attended May-Oct 1300-0100Z‡, Nov-Apr
 1300-2300Z‡. Self serve fuel (100LL and JET A+) avbl 24 hrs.
 Deer on and invof arpt. TPA—897(850) light acft, 1547(1500)
 heavy acft. Trees parallel rwy +370' east and west of centerline
 (50 to 90'). MIRL Rwy 03-21 preset low ints, increase ints and
 ACTIVATE REIL Rwy 03 and Rwy 21—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.175 (757) 787-5660.

COMMUNICATIONS: CTAF/UNICOM 122.8

② **PATUXENT APP/DEP CON** 127.95

GCO 135.075 (NORFOLK CLNC)

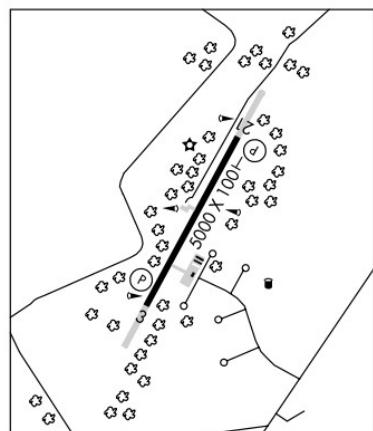
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

CAPE CHARLES (L) VORTAC 112.2 CCV Chan 59 N37°20.85'

W75°59.86' 042° 21.2 NM to fld. 10/10W.

NDB (MHW) 336 BDB N37°34.22' W75°47.90' 032° 4.9 NM
 to fld.

ILS 110.15 I-MFV Rwy 03. LOC only.

**MIDDLE PENINSULA RGNL** (See WEST POINT)

MONETA

SMITH MOUNTAIN LAKE (W91) 4 SE UTC-5(-4DT) N37°06.46' W79°35.55'

892 B S4 FUEL 100LL NOTAM FILE DCA

RWY 05-23: H3058X50 (ASPH) MIRL 1.2% up NE

RWY 05: Thld dspclcd 250'. Tree. RWY 23: REIL, Tree.

AIRPORT REMARKS: Attended dalgt hours. Parachute Jumping. Deer on and invof apt. Rwy 23 REIL out of svc indefinitely. Rwy 05-23 MIRL OTS indef.

COMMUNICATIONS: CTAF/UNICOM 122.8

ROANOKE APP/DEP CON 135.0

RADIO AIDS TO NAVIGATION: NOTAM FILE LYH.

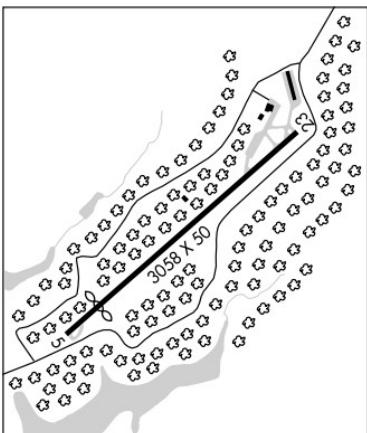
LYNCHBURG (L) VORTAC 109.2 LYH Chan 29 N37°15.28'

W79°14.19' 248° 19.2 NM to fld. 880/05W. HIWAS.

CINCINNATI

L-26J

IAP



MONTEBELLO N37°54.03' W79°06.41' NOTAM FILE DCA.

(L) VOR/DME 115.3 MOL Chan 100 030° 24.0 NM to Shenandoah Valley Rgnl.

CINCINNATI

H-10H, 12H, L-26J

3460/05W.

VOR portion unusable: 205°-220° byd 10 NM blo 6000'.

DME portion unusable:

061°-088° byd 35 NM blo 6000'

330°-335° byd 30 NM blo 6000'

114°-120° byd 28 NM blo 6500'

335°-001° byd 30 NM blo 7000'

154°-220° byd 28 NM blo 8000'

RCO 122.1R 115.3T (LEESBURG RADIO)

MOUNTAIN EMPIRE (See MARION/WYTHEVILLE)

NAILR N38°27.26' W77°54.32' NOTAM FILE DCA.

NDB (MHW) 351 MSQ 037°4.8 NM to Culpeper Rgnl.

WASHINGTON

L-29E, 34E, 36I, A

NEW KENT CO (See QUINTON)

NEW LONDON (See FOREST)

NEW MARKET (8W2) 2 W UTC-5(-4DT) N38°39.34' W78°42.48'

975 B S2 FUEL 100LL TPA-1800(825) NOTAM FILE DCA

WASHINGTON

L-22G

RWY 06-24: H2920X60 (ASPH) LIRL (NSTD)

RWY 06: Trees. Rgt tfc. RWY 24: Thld dspclcd 900'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2130Z‡. Unattended Thanksgiving, Christmas and New Years day. Fuel 24 hr credit card svc. Hot air balloons weekends early morning and late afternoon. Deer and birds on and invof rwy. Small holes adjacent to turn around area AER 24. Numerous cracks in rwy, conventional-gear acft be alert. Balloon repair station. Rwy 06-24 10' trees along fenceline parallel to rwy along south side. Rwy 06 lgtd thld relocated 100' and Rwy 24 lgtd thld relocated 930' for night ops, 2020' Rwy 06-24 lgts at ngt. Arpt lights opr dusk-0300Z‡. Rotating bcn ops dusk-0300Z‡. Rwy 06-24 NSTD LIRL thld lgts one fixture each side.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

LINDEN (L) VORTAC 114.3 LDN Chan 90 N38°51.26' W78°12.33' 249° 26.4 NM to fld. 2440/06W.

NEWPORT NEWS/WILLIAMSBURG INTL (PHF) 9 NW UTC-5(-4DT)

WASHINGTON

N37°07.91' W76°29.58'

H-101, 12I, L-34E, 35D, 36H

42 B S4 FUEL 100LL, JET A OX 4 LRA Class I, ARFF Index B NOTAM FILE PHF

IAP, AD

RWY 07-25: H8003X150 (CONC-GRVD) S-100, D-200, 2S-175,
2D-350 HIRL

RWY 07: MALSR. Trees.

RWY 25: REIL. VASI(V4L)—GA 3.0° TCH 55'. Trees.

RWY 02-20: H6526X150 (CONC-GRVD) S-100, D-200, 2S-175,
2D-350 HIRL

RWY 02: VASI(V4L)—GA 3.0°TCH 61'.

RWY 20: REIL. VASI(V4L)—GA 3.0°TCH 42'. Road.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 20	07-25	5200
RWY 25	02-20	6550

RUNWAY DECLARED DISTANCE INFORMATION

RWY 02: TORA-6526 TODA-6526 ASDA-6526 LDA-6526

RWY 07: TORA-8003 TODA-8003 ASDA-8003 LDA-8003

RWY 20: TORA-6526 TODA-6526 ASDA-6526 LDA-6526

RWY 25: TORA-8003 TODA-8003 ASDA-8003 LDA-8003

AIRPORT REMARKS: Attended continuously. Glider activity approximately 19 miles southwest of arpt, up to base of clouds. Birds and deer on and invof arpt. PPR 45 minutes for unscheduled air carrier ops with more than 30 passenger seat call arpt manager

757-877-0221. Rwy 07-25 spalling, weeds, and pavement cracks. When twr clsd HIRL Rwy 02-20; VASI Rwy 02 and Rwy 20; REIL Rwy 20; HIRL Rwy 07-25 and twy lghts on continuously. Rwy 07 MALSR unmonitored. Ldg fee for acft over 12,500 lbs. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (757) 874-3682.**COMMUNICATIONS:** CTAF 118.7 ATIS 128.65 UNICOM 122.95

RCO 122.65 122.2 (LEESBURG RADIO)

(R) NORFOLK APP CON 125.7 (R) NORFOLK DEP CON 124.9 CLNC DEL 124.9 (when twr clsd)
TOWER 118.7 (1100-0400Z‡.) GND CON 121.9 CLNC DEL 121.65 PRE TAXI CLNC 121.65**AIRSPACE:** CLASS D svc effective 1100-0400Z‡ other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE ORF.

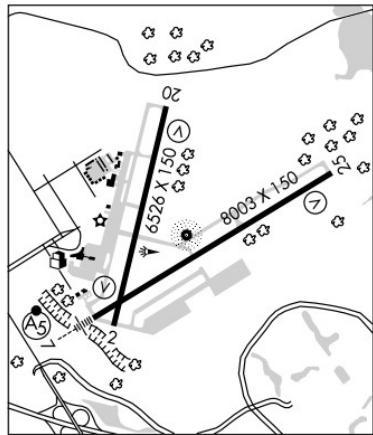
NORFOLK (H) VORTAC 116.9 ORF Chan 116 N36°53.51' W76°12.02' 323° 20.1 NM to fld. 20/07W.

HENRY NDB (MHW) 375 PJS N37°07.97' W76°29.59' at fld. NOTAM FILE DCA.

ILS/DME 110.1 I-PHF Chan 38 Rwy 07. Class IA. Unmonitored when tower closed.

ILS/DME 110.1 I-DHY Chan 38 Rwy 25. Class IE.

ILS/DME 109.3 I-FJQ Chan 30 Rwy 20. (LOC only)

**NEW RIVER VALLEY** (See DUBLIN)

NORFOLK**CHESAPEAKE RGNL** (CPK) 12 S UTC-5(-4DT) N36°39.94' W76°19.24'

19 B S4 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE CPK

RWY 05-23: H5500X100 (ASPH-GRVD) S-30 HIRL

WASHINGTON

H-10I, 12I, L-35D

IAP

RWY 05: MALSR. PAPI(P4L)—GA 3.0° TCH 42'. Tree.

RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 42'. Tree. Rgt tfc.

AIRPORT REMARKS: Attended 1300-0100Z‡. For fuel after hrs call in advance 757-421-9000. Self-svc avbl. Deer and geese on and invof rwy. Small trees along east side of rwy approximately 400' to 500' off rwy centerline. Noise abatement procedures in effect; ctc arpt manager 757-432-8110. TPA 1019(1000), turbine/large acft 1519(1500). ACTIVATE HIRL Rwy 05-23, MALSR Rwy 05 and REIL Rwy 23—CTAF.

WEATHER DATA SOURCES: AWOS-3 123.675 (757) 421-0252.**COMMUNICATIONS:** CTAF 123.05 UNICOM 123.075

(R) NORFOLK APP/DEP CON 118.9 GCO 135.075 (NORFOLK CLNC)

RADIO AIDS TO NAVIGATION: NOTAM FILE ORF.

NORFOLK (H) VORTAC 116.9 ORF Chan 116 N36°53.51'

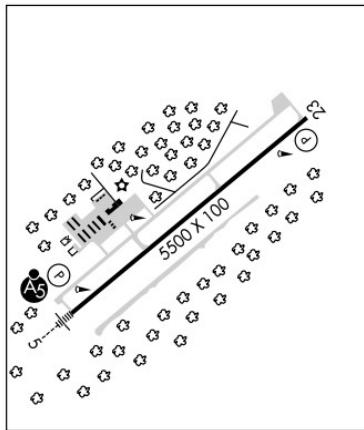
W76°12.02' 210° 14.8 NM to fld. 20/07W.

CHESI NDB (MHW-LOM) 233 EY N36°35.99' W76°22.91' 046°

4.9 NM to fld.

ILS/DME 111.7 I-EYK Chan 54 Rwy 05. Class IB. LOM

CHESI NDB. LOM unusable byd 15 NM.

**HAMPTON ROADS EXECUTIVE** (PVG) 7 SW UTC-5(-4DT) N36°46.81' W76°26.93'

23 B S4 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE DCA

WASHINGTON

L-35D, 36H

IAP

RWY 10-28: H4056X70 (ASPH) S-12.5 MIRL

RWY 10: Hill. Rgt tfc, fixed wing acft.

RWY 28: Thld dsplcd 200'. Trees.

RWY 02-20: H3524X70 (ASPH) S-12.5 MIRL

RWY 02: Thld dsplcd 898'. Road.

RWY 20: Thld dsplcd 928'. Trees. Rgt tfc, fixed wing acft.

AIRPORT REMARKS: Attended Apr-Oct 1300-0100Z‡, Nov-Mar 1300-2300Z‡. Extensive helicopter training. Deer on and invof apt. 1049 ft MSL towers 1.5 NM NW of field. Rwy 10-28 preferred use rwy. Multiple +1000' AGL towers 1.5 NM northwest of afld. TPA—700(677) for helicopters. ACTIVATE MIRL Rwy 02-20 and Rwy 10-28—CTAF.

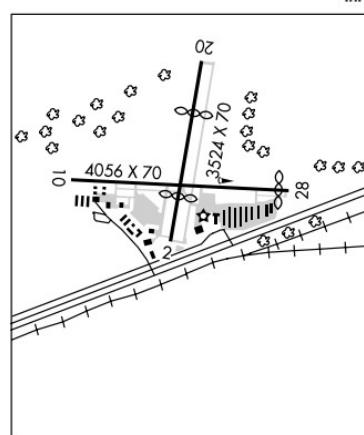
WEATHER DATA SOURCES: AWOS-3 118.375 (757) 465-2175.**COMMUNICATIONS:** CTAF/UNICOM 123.0

(R) NORFOLK APP/DEP CON 118.9

RADIO AIDS TO NAVIGATION: NOTAM FILE ORF.

NORFOLK (H) VORTAC 116.9 ORF Chan 116 N36°53.51'

W76°12.02' 248° 13.7 NM to fld. 20/07W.



NORFOLK INTL (ORF) 3 NE UTC-5(-4DT) N36°53.68' W76°12.07'

26 B S4 FUEL 100LL, JET A OX 1, 2, 4 LRA Class I, ARFF Index C
NOTAM FILE ORF

WASHINGTON

H-10I, 12I, L-35D, 36H

IAP, AD

RWY 05-23: H9001X150 (ASPH-CONC-GRVD) S-150, D-200, 2S-175, 2D-350, 2D/2D2-475 HIRL CL

RWY 05: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 67'. Thld dsplcd

1000'. Trees. Rgt tfc.

RWY 23: MALSR. PAPI(P4L)—GA 3.0° TCH 55'. Trees.

RWY 14-32: H4875X150 (ASPH-GRVD) S-75, D-100, 2S-127

MIRL

RWY 14: REIL. PAPI(P2L)—GA 3.0° TCH 34'. Thld dsplcd 213'. Tree.

Rgt tfc.

RWY 32: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 14	05-23	2850
RWY 23	14-32	6300

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TODA-9001 TODA-9001 ASDA-9001 LDA-8001

RWY 14: TODA-4875 TODA-4875 ASDA-4875 LDA-4662

RWY 23: TODA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 32: TODA-4875 TODA-4875 ASDA-4875 LDA-4875

AIRPORT REMARKS: Attended continuously. Parachute Jumping. Flocks of birds on and invof aptt. Twy D clsd indef. Noise abatement

procedures in effect. Rwy 05-23 center portion asph, 1500' each end conc. Rwy 05-23 grooved 7300 ft X130 ft standard grooving beginning 200 ft from approach end Rwy 05. Ldg fee. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (757) 460-9348. WSP.

COMMUNICATIONS: ATIS 127.15 757-464-1390

RCO 122.1R 116.9T (LEESBURG RADIO)

(R) APP CON 118.9(010°-080°) (180°-310°) (R) DEP CON 125.2

TOWER 120.8 GND CON 121.9 CLNC DEL 118.5

AIRSPACE: CLASS C svc continuous ctc APP CON 125.7(311°-009°) 118.9(010°-080°) (180°-310°)

RADIO AIDS TO NAVIGATION: NOTAM FILE ORF.

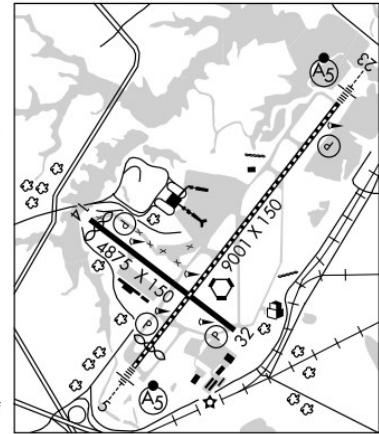
(H) VORTAC 116.9 ORF Chan 116 N36°53.51' W76°12.02' at fld. 20/07W.

VORTAC unusable byd 30 NM blo 2500'.

INGLE NDB (LOM) 329 OR N36°50.43' W76°15.08' 046° 4.1 NM to fld.

ILS/DME 109.1 I-ORF Chan 28 Rwy 05. Class IB. LOM INGLE NDB. GS unusable for coupled apch blo 744'.

ILS/DME 109.1 I-JZQ Chan 28 Rwy 23. Class IA.



NORFOLK NS (CHAMBERS FLD) (NGU)(KNGU) N 0 NW UTC-5(-4DT)

WASHINGTON

H-10I, 12I, L-35D, 36H

DIAP, AD

N36°56.25' W76°17.36'

17 B AOE NOTAM FILE DCA

Not insp.

RWY 10-28: H8371X200 (ASPH-CONC-GRVD) PCN 47 R/B/W/T HIRL CL

RWY 10: ALSF2. OLS. TDZL. REIL. PAPI(P4R)—GA 3.0° TCH 35'. Thld dsplcd 304'.

RWY 28: SSALS. OLS. TDZL. REIL. PAPI(P4R)—GA 3.0° TCH 37'. Thld dsplcd 995'. Rgt tfc.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 10: LDA-8067

RWY 28: LDA-7376

ARRESTING GEAR/SYSTEMS

RWY 10: HOOK E28(B)(1500')

HOOK E28(B)(1060') **RWY 28**

MILITARY SERVICE: A-GEAR Avoid centerline lgt Rwy 10-28 during cable engagement to prevent tailhook skip. Distance Rwy 28 measured from dsplcd thld. E-28(B) in raised position at dep end of rwy only. Short-fld gear avbl with 20 minutes prior notice. **JASU** (NC10-(C) (NC-8A/A1) (NCPP-105 Ctc Air Ops Duty Officer to ensure avbl.) **FUEL** J5. No tran helicopter hot pit without prior coordination with host squadron.

FLUID ADI SP PRESAIR LHOX LOX **OIL** O-128-132-133-148-156 **TRAN ALERT** Limited tran maintenance avbl weekdays only 1200–2000Z#. Tran maintenance unavbl other times. 2 hr prior notice required for LOX. Lavatory svc unavbl for C-130 acft. Potable water unavbl.

MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Remark. **RSTD** PPR only DSN 262-3419/3429. AMC/ATOC DSN 564-4735/3922, C757-444-4735/3922. Acft utilizing AMC terminal ctc ATOC/AMC terminal 15 min prior arr with load report. Acft overseas ctc AMC/ATOC via phone patch 2 hr prior arr for CSTMS. All other acft, ctc Base Ops 15 min prior arr. **CAUTION** Extensive fish spotter acft activity (single engine general aviation acft) upwards from 1500' over Chesapeake Bay and adjacent coastal waters. Arriving/departing Traffic Collision Avoidance System equipped acft expect numerous Traffic Collision Avoidance System alerts from ships or transiting into/out of the Chesapeake and coastal waters. Extensive VFR tfc opr west of Chambers Class D and Norfolk Class C Airspace. Bird hazard. **TFC PAT** Basic fixed wing VFR minimums 1000' and 3 NM. Heliport Rwy 09R-27L, emerg use only. **NS ABMT** No practice apch Mon–Sat 0400–1200Z#, Sun 0400–1800Z#. Other times by NOTAM. No helicopter overflight Willoughby Spit except via Point Xray (Chambers TACAN R-042/1.5 DME) at 500'.

WEATHER DATA SOURCES: ASOS DSN 564-9173 C(757) 444-9173.

COMMUNICATIONS: SFA ATIS 118.425 342.0

(R) APP CON 118.9 273.475 (010°–310°) 125.7 335.625 (311°–009°)

CHAMBERS TOWER 124.3 290.5 379.15 **GND CON** 121.8 370.85 **CLNC DEL** 120.7 348.0

(R) DEP CON 363.125

NAVYNORFOLK HELI TWR 126.375 290.5 Opr Mon–Fri 1300–0400Z#, clsd Sat, Sun, and holidays.

NAVYNORFOLK HELI GND CON 298.95 **AMC/ATOC** 130.65 349.5 **METRO** 271.6 **BASE OPS** 131.525 268.8

RADIO AIDS TO NAVIGATION: NOTAM FILE ORF.

(H) VORTAC 116.9 ORF Chan 116 N36°53.51' W76°12.02' 310° 5.1 NM to fld. 20/07W.

CHAMBERS (L) TACAN Chan 86Y NGU (113.95) N36°56.40' W76°16.64' at fld. 24/10W. NOTAM FILE NGU.

TACAN unusable:

190°–195° byd 35 NM

261°–269° byd 20 NM

ILS/DME 108.95 I-NGU Chan 26(Y) Rwy 10. No NOTAM MP Wed 1230–1630Z#.

ASR/PAR

COMM/NAV/WEATHER REMARKS: Radar see Terminal FLIP for Radar Minima.

OCEANA NAS (APOLLO SOUCEK FLD) (NTU)(KNTU) N 3 SW UTC-5(-4DT)

WASHINGTON

H-10I, 12I, L-35D

DIAP, AD

N36°49.36' W76°01.91'

23 B NOTAM FILE DCA Not insp.
RWY 05R-23L: H12000X200 (PEM) PCN 50 R/C/W/T HIRL CL
RWY 05R: ALSF1. OLS. **RWY 23L:** ALSF1. OLS.
RWY 05L-23R: H8001X150 (CONC) PCN 18 R/C/W/T HIRL
RWY 05L: OLS. **RWY 23R:** OLS.
RWY 14L-32R: H8001X150 (CONC) PCN 19 R/C/W/T HIRL
RWY 14L: OLS. **RWY 32R:** OLS.
RWY 14R-32L: H8000X200 (PEM) PCN 58 R/C/W/T HIRL CL
RWY 14R: OLS. **RWY 32L:** ALSF1. OLS.

ARRESTING GEAR/SYSTEMS

RWY 05R: HOOK E28(B) (1416')
RWY 05L: HOOK E28(B) (1476')
RWY 14L: HOOK E28(B) (1446')
RWY 14R: HOOK E28(B) (1420')

HOOK E28(B) (1438') **RWY 23L**
 HOOK E28(B) (1500') **RWY 23R**
 HOOK E28(B) (1500') **RWY 32R**
 HOOK E28(B) (1442') **RWY 32L**

MILITARY SERVICE: A-GEAR Arresting gear normally rigged all rwys. exc inboard rwy shortfield arresting gear. **JASU** (NC-10C) (NC-108) (NCPP-105 Ctc Air Ops Duty Officer to ensure available.) **FUEL** Limited fuel svc avbl 0300-1300Z‡ due to personnel restriction. Tran hot pit avbl Mon-Fri 1300-0300Z‡, PPR, unavbl weekends/holidays. J5.

FLUID SP LHOX LOX OIL 0-156 TRAN ALERT Tran line Mon-Fri 1230-0330Z‡, Sat-Sun and holidays 1300-2300Z‡. Limited parking/storage facilities. During peak periods extensive delay in tran servicing. JOSAC/NALO have priority. No LAV svc or potable water avbl.

MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Information. **RSTD** PPR all non-Oceania based acft DSN 433-2162/2163, C757-433-2162/2163. Straight-in apch to final ldg only 0300-1200Z‡, Sun 0300-1800Z‡. Vice final ldg only 0400-1200Z‡, Sun 0400-1800Z‡. Sun all fixed wing and helicopter flight abv 1000' arr/dep NTU must file IFR flight plan. VFR/special VFR helicopter route mandatory for all helicopter flights at or bld 1000'. **CAUTION** During VMC all dep and practice instrument apch fly rwy heading and do not exceed 1000' until past dep end due extensive overhead traffic. **TFC PAT** Simultaneous ldg/dep are conducted on parallel rwy located 700' apart. Extensive jet training Oceana NAS/Fentress NALF. Reduced rwy separation standard in effect USN/USMC acft. During peak periods expect one app to full stop ldg.

NS ABTMT Strict compliance rqr with program outlined in FLIP AP/1 Supplementary Arpt Remark.

CSTMS/AG/IMG Avbl Oceana NAS based tactical acft only. Require 48 hr prior notice to Base Ops. Aircrew rqr to remain in acft until released by Customs.

COMMUNICATIONS: SFA ATIS 317.6

(R) APP/DEP CON 119.6 288.3 (NORTH NTU R-360°-150°) 123.9 266.8 (SOUTH NTU R-151°-359°) 323.05
TOWER 127.075 360.2 **GND CON** 336.4 **CLNC DEL** 254.4
PMSV METRO 387.4 **BASE OPS** 284.9 **ATCOM** 6723

RADIO AIDS TO NAVIGATION: NOTAM FILE NTU.

(L) **TACAN** Chan 113 NTU (116.6) N36°49.45' W76°02.22' at fid. 76/10W.

TACAN unusable:

000-059° byd 30 NM bld 3,000'	210°-239° byd 20 NM bld 4,000'
090°-109° byd 30 NM bld 1,500'	240°-290° bld 6,000'
110°-199° byd 30 NM bld 2,000'	291°-339° byd 15 NM bld 5,000'
200°-209° byd 20 NM bld 2,000'	340°-359° byd 20 NM bld 3,000'

ASR/PAR

COMM/NAV/WEATHER REMARKS: Radar see Terminal FLIP for Radar Minima.

ORANGE CO (OMH) 3 E UTC-5(-4DT) N38°14.83' W78°02.74'

465 B S2 FUEL 100LL, JET A+ NOTAM FILE OMH

RWY 08-26: H3200X75 (ASPH-AFSC) S-12 MIRL 0.6% up NE

RWY 08: REIL, PAPI (P2L)—GA 4.0° TCH 39'. Trees.

RWY 26: REIL, PAPI (P2L)—GA 4.0° TCH 40'. Trees.

AIRPORT REMARKS: Attended 1330-2300Z#. Fuel 100LL self svc after hrs. Fuel Jet A+ self svc after hrs. Parachute Jumping. ACTIVATE MIRL Rwy 08-26, REIL Rwy 08 and Rwy 26 and PAPI Rwy 08 and Rwy 26—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.075 (540) 672-0505.

COMMUNICATIONS: CTAU/UNICOM 122.8

(R) POTOMAC APP/DEP CON 132.85

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

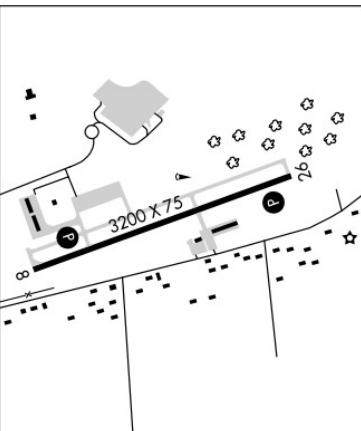
GORDONSVILLE (H) VORTAC 115.6 GVE Chan 103 N38°00.82'

W78°09.18' 026° 14.9 NM to fld. 382/06W. HIWAS.

WASHINGTON

L-34E, 36H, A

IAP



PETERSBURG N37°07.81' W77°34.48' NOTAM FILE PTB.

WASHINGTON

L-36H

NDB (MHW) 284 PTB 053° 4.6 NM to Dinwiddie County.

Unmonitored when arpt unattended.

PETERSBURG

DINWIDDIE CO

(PTB) 5 SW UTC-5(-4DT) N37°11.03' W77°30.44'

193 B S4 FUEL 100LL, JET A TPA—993(800) NOTAM FILE PTB

RWY 05-23: H5002X100 (ASPH-GRVD) S-12.5, 2S-83 MIRL

RWY 05: REIL, ODALS, PAPI(P4L)—TCH 42'. Tree.

RWY 23: REIL, PAPI(P4L)—GA 3.0° TCH 40'. Tree.

RWY 14-32: H3061X50 (ASPH) S-4

RWY 14: Tree. RWY 32: Tree.

AIRPORT REMARKS: Attended Apr-Sep Mon-Sun 1200-0000Z#. Oct-Mar Mon-Sun 1200-2300Z#. Self-svc fueling available after hrs. Rwy 14-32 some cracking mainly at the Rwy 14 end. Rwy 14-32 broken pavement on shoulders byd 25 ft left and right of centerline. Rwy 14-32 gross weight limited by arpt operator to 4000 lbs single wheel gear. Ultralight activity on and invof arpt. Rwy 14 old thld markings visible on rwy. ACTIVATE MIRL Rwy 05-23, PAPI Rwy 05 and Rwy 23, ODALS Rwy 05 and REIL Rwy 05 and Rwy 23—CTAF.

WEATHER DATA SOURCES: AWOS-3 133.325 (804) 861-5551.

COMMUNICATIONS: CTAU/UNICOM 122.7

(R) POTOMAC APP/DEP CON 134.7

GCO 135.075 (POTOMAC CLNC)

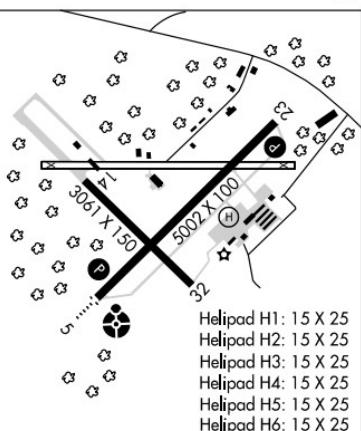
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

HOPEWELL (L) VORTAC 112.0 HPW Chan 57 N37°19.73'

W77°06.96' 251° 20.7 NM to fld. 70/06W. HIWAS.

NDB (MHW) 284 PTB N37°07.81' W77°34.48' 053° 4.6 NM to fld. NOTAM FILE PTB. Unmonitored when arpt unattended.

ILS 110.3 I-JLS Rwy 05. LOC only. Unmonitored when arpt unattended.



Helipad H1: 15 X 25

Helipad H2: 15 X 25

Helipad H3: 15 X 25

Helipad H4: 15 X 25

Helipad H5: 15 X 25

Helipad H6: 15 X 25

HELIPAD H1: H15X25 (CONC)

HELIPAD H2: H15X25 (CONC)

HELIPAD H3: H15X25 (CONC)

HELIPAD H4: H15X25 (CONC)

HELIPAD H5: H15X25 (CONC)

HELIPAD H6: H15X25 (CONC)

PULASKI N37°05.26' W80°42.77' NOTAM FILE PSK.

CINCINNATI

(H) VORTAC 116.8 PSK Chan 115 031°2.9 NM to New River Valley. 2120/06W.

H-10H, 12H, L-26H

HIWAS.

DME portion unusable:

034°–038° byd 25 NM	287°–316° byd 25 NM blo 10,000'
135°–175° byd 25 NM blo 10,000'	315°–335° byd 10 NM blo 10,000'
200°–225° byd 10 NM	334°–039° byd 25 NM blo 10,000'
284°–286° byd 10 NM blo 10,000'	

RCO 122.1R 116.8T (LEESBURG RADIO)

RCO 122.3 (LEESBURG RADIO)

QUANTICO MCAF (TURNER FLD) (NYG) MC 1 S UTC–5(–4DT) N38°30.22' W77°18.30'

WASHINGTON

10 B NOTAM FILE DCA Not insp.

L-29E, 34E, 36I, A

RWY 02–20: H4250X200 (ASP) PCN 51 R/B/W/T HIRL

DIAP, AD

RWY 02: PAPI.

MILITARY SERVICE: LGT Rwy 02 PAPI and PAR runway point of intercept not coincident. Rwy 02 centerline lighting first 1000'. **FUEL J8. TRAN ALERT** No transient maintenance avbl. Require qualified crew member to assist in cold refueling.

MILITARY REMARKS: Opr Mon–Thur 1300–0200Z‡, Fri 1300–2200Z‡, closed Sat, Sun and holidays. **RSTD** All tran acft 24 hr PPR; Ops chief DSN 278–2085/2908, C703–784–2085/2908. After 2200Z‡ and on weekends call DSN 278–0920, C703–432–0920, C703–675–4144 for PPR. All tailhook acft requiring A-gear ldg, advance notice required. Requesting unit must coordinate with MWSS via Marine Corps Air Facility Quantico ops officer in charge. Clsd fld opr not authorized for tran acft.

CAUTION Twy C clsd indef. Limited Visiting Acft Line parking. Bird hazard vicinity Rwy 02–20 SR–SS. Heavy migratory bird activity Oct–Feb. **NS ABMTT** The area in and around the Quantico Class D Airspace is noise sensitive. Helicopters transit Quantico Class D Airspace at or abv 500' AGL. **CUSTOMS/AGRICULTURE/IMMIGRATION:**

CSTMS/AG/IMG Avbl with 72 hr prior notice PPR only. **MISC** MCAF Quantico and R–6608 lie within the Washington ADIZ. Pilots must adhere to ADIZ reporting procedures in both these areas. Category II crash/fire rescue svc. Rwy 02 and Rwy 20 grooved first 1300'. MCAF Quantico has no provisions for Space A passengers. Space A passengers cannot be on-loaded or off-loaded due to security issues.

COMMUNICATIONS: SFA ATIS 263.15 (Mon and Fri 1300–2200Z‡, Tue 1600–0200Z‡, Wed–thu 1300–0200Z‡)

(R) ARRIVAL 127.05 290.375 (Mon 1600–2200Z‡, Tue–Thur 1300–0200Z‡, Fri 1300–2200Z‡, open Sat, Sun and holidays by NOTAM only)

(R) POTOMAC APP/DEP CON 124.65 306.925

TOWER 118.6 360.2 (Mon–Thur 1300–0200Z‡, Fri 1300–2200Z‡, closed Sat, Sun and holidays.)

GND CON 121.75 340.2

PMSV METRO/BASE OPS 355.3

AIRSPACE: CLASS D svc Mon–Thur 1300–0200Z‡, Fri 1300–2200Z‡, closed Sat, Sun, and holidays, other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

BROOKE (L) VORTAC 114.5 BRV Chan 92 N38°20.18' W77°21.18' 022° 10.3 NM to fld. 145/9W.

ASR/PAR (Mon 1600–2200Z‡, Tue–Thu 1300–0200Z‡, Fri 1300–2200Z‡, open Sat, Sun and holidays by NOTAM only)

COMM/NAV/WEATHER REMARKS: Radar see Terminal FLIP for Radar Minima.

QUINTON

NEW KENT CO (W96) 8 W UTC-5(-4DT) N37°30.21' W77°07.59'

123 B FUEL 100LL TPA—923(800) NOTAM FILE DCA
RWY 10-28: H3600X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(P2R)—GA 4.0° TCH 45'. Tree.

RWY 28: REIL. PAPI(P2L)—GA 4.0° TCH 45'. Tree.

AIRPORT REMARKS: Attended 1400–2200Z‡. Fuel avbl 24 hrs, credit card required when unattended. Deer on and in vicinity of arpt. Ultralight activity on and in vicinity of arpt. Rotating bcn not visible when approaching from the north. MIRL and REIL Rwy 10–28 preset low ints; to increase ints ACTIVATE—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

(R) POTOMAC APP/DEP CON 126.4

GCO 135.075 (POTOMAC CLNC) OTS indef.

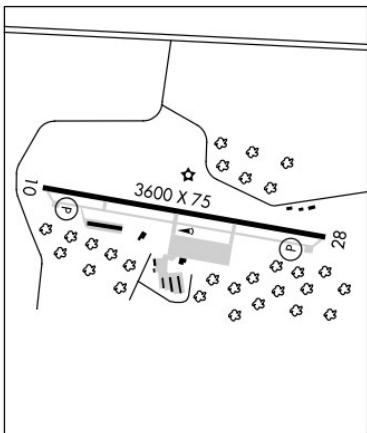
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

HOPEWELL (L) VORTAC 112.0 HPW Chan 57 N37°19.73'
 W77°06.96' 003° 10.5 NM to fld. 70/06W. HIWAS.

WASHINGTON

L-34E, 36H

IAP

**RICHLANDS****TAZEWELL CO**

(JFZ) 2S UTC-5(-4DT) N37°03.83' W81°47.90'

2653 B FUEL 100LL, JET A+ NOTAM FILE 6V3

RWY 07-25: H4300X75 (ASPH) S-12.5, D-18 MIRL

RWY 07: REIL. PAPI(P2L)—GA 4.0°. Tree.

RWY 25: REIL. PAPI(P2L)—GA 4.0° TCH 53'. Tree.

AIRPORT REMARKS: Attended 1300–2300Z‡. MIRL Rwy 07–25 preset low ints; to increase ints and ACTIVATE REIL Rwy 07, Rwy 25 and PAPI Rwy 07 and Rwy 25—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.075 (276) 596–9927.

COMMUNICATIONS: CTAF/UNICOM 123.05

(R) INDIANAPOLIS CENTER APP CON 126.575

(R) ATLANTA CENTER DEP CON 132.9

GCO 135.075 (ATLANTA CLNC and DCA FSS)—unreliable.

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

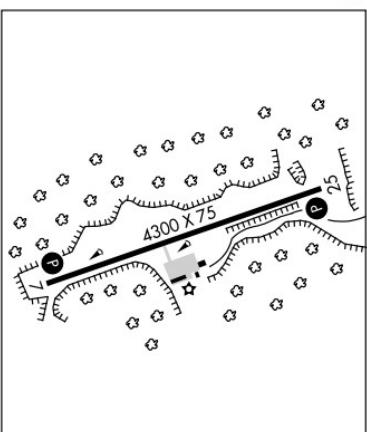
GLADE SPRING (L) VOR/DME 110.2 GZG Chan 39 N36°49.51'
 W82°04.74' 045° 19.7 NM to fld. 4200/02W. HIWAS.

ILS/DME 109.75 I-JFZ Chan 34(Y) Rwy 25. LOC only.
 DME unusable byd 17 NM blo 5900'.

CINCINNATI

L-26H

IAP



RICHMOND N37°30.14' W77°19.22' NOTAM FILE RIC.

(H) VORTAC 114.1 RIC Chan 88 at Richmond Intl. 159/09W.

RCO 122.4 122.2 122.1R 114.1T (LEESBURG RADIO)

WASHINGTON

H-10H, 12H, L-34E, 36H

RICHMOND**CHESTERFIELD CO**

(FCI) 4 SW UTC-5(-4DT) N37°24.39' W77°31.49'

236 B S4 FUEL 100LL, JET A OX 3 TPA—See Remarks LRA NOTAM FILE DCA

WASHINGTON

RWY 15-33: H5500X100 (ASPH-GRVD) S-60, D-80 HIRL 0.7% up NW

H-10H, 12I, L-36H

IAP

RWY 15: REIL, PAPI(P4L)—GA 3.0° TCH 42'. Antenna.

RWY 33: MALSR, PAPI(P4L)—GA 3.0° TCH 53'. Pole.

AIRPORT REMARKS: Attended 1200-0300Z‡. Fuel after hrs call

804-271-7793 between 0300-1200Z‡. 400 ft twr 5 NM N arpt.

Aircraft on ILS approach to Richmond Intl crossing over arpt.

Noise sensitive area north of arpt. No wind voluntary use of Rwy 15 preferred. Med-flight, irregular departure pattern. Helicopter parking adjacent to Twy C. Rwy 15 REIL OTS indef.

TPA—1236(1000) single engine, 1736(1500) multi-engine. HIRL

Rwy 15-33 preset low ints; increase ints and ACTIVATE MALSR

Rwy 33 and REIL Rwy 15—CTAF.

WEATHER DATA SOURCES: AWOS-3 128.625 (804) 271-8426.**COMMUNICATIONS:** CTAF/UNICOM 123.05

FLAT ROCK RCO 122.1R 113.3T (LEESBURG RADIO)

② POTOMAC APP/DEP CON 134.7 POTOMAC CLNC DEL 124.6

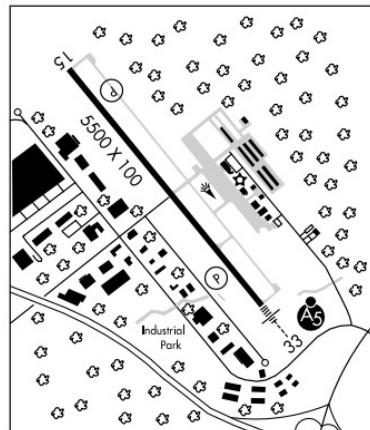
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

FLAT ROCK (H) VORTAC 113.3 FAK Chan 80 N37°31.71'

W77°49.69' 123° 16.2 NM to fld. 460/06W.

ILS/DME 108.3 I-CFU Chan 20 Rwy 33. Class IB.

LOC/DME unmonitored when arpt unattended.



RICHMOND INTL (RIC) 6 E UTC-5(-4DT) N37°30.31' W77°19.18'

167 B S4 FUEL 100LL, JET A OX 3, 4 TPA—See Remarks LRA
Class I, ARFF Index C NOTAM FILE RIC

WASHINGTON
H-10H, 12I, L-34E, 36H
IAP, AD

RWY 16-34: H9003X150 (ASPH-GRVD) S-125, D-200, 2S-175,
2D-340 HIRL CL

RWY 16: MALS.R. VASI(V4L)—GA 3.0°TCH 56'.

RWY 34: ALSF2. TDZL.

RWY 02-20: H6607X150 (ASPH-GRVD) S-125, D-200, 2S-175,
2D-340 PCN 70 F/C/W/T HIRL

RWY 02: MALS.R. PAPI(P4L)—GA 3.0°TCH 49'. Pole.

RWY 20: REIL. PAPI(P4L)—GA 3.0°TCH 49'. Tree.

RWY 07-25: H5326X100 (ASPH-GRVD) S-125, D-200, 2S-175,
2D-340 PCN 57 F/C/W/T HIRL

RWY 07: Railroad.

RWY 25: REIL. VASI(V4L)—GA 3.0° TCH 52'. Tree.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 02: TORA-6607 TODA-6607 ASDA-6607 LDA-6607

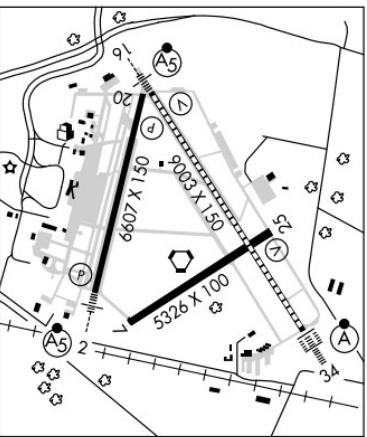
RWY 07: TORA-5326 TODA-5326 ASDA-5326 LDA-5326

RWY 16: TORA-9003 TODA-9003 ASDA-9003 LDA-9003

RWY 20: TORA-6607 TODA-6607 ASDA-6607 LDA-6607

RWY 25: TORA-5326 TODA-5326 ASDA-5326 LDA-5326

RWY 34: TORA-9003 TODA-9003 ASDA-9003 LDA-9003



AIRPORT REMARKS: Attended continuously. Tower 245 ft AGL 2.5 NM NW; unlighted. 220 ft MSL crane (mkd and lgtd) 5.4 NM south of apt. Bird activity invof all rwy's and twys and invof apt. Non-radio equipped vehicles crossing midfield Twys C, E, and H and driving on Twy L south of Rwy 07-25. No practice landings 0300-1200Z‡. Hold line Rwy 20 east side located across Rwy 34 150' from dep end. Hold line Rwy 20 west side across Twy A and also serves as hold line for Rwy 16; signage indicates both rwy's. Due to the close proximity to Rwy 02-20, Twy U signage may be behind acft, once clear of Rwy 02-20. ATC clearance required for pushbacks onto movement areas. All acft with wingspans greater than 118' and wheel bases greater than 59' are restricted from using Twys J, K, R, (between Twy A and FSDO ramp), S, T (south of Twy J), and V (west of Twy A). Twys M, M1, M2, M3 and Twy R west of FSDO designated for acft with wingspan less than 79'. Twy A between Twy C and Twy E restricted from use by acft wingspans greater than 171'. Twy T (north of Twy F) restricted from use by acft with wingspans greater than 118'. Intersection requires judgemental oversteering. Air carrier apron clsd to unscheduled acft weighing under 35,000 lbs. No edge lgts on Twys M and S—reflectors only. The following areas not visible from the twr: portions of the air carrier apron, Army National Guard acft parking ramp. TPA-1200(1033) single engine, lgt acft, 1700(1533) all others. Ldg fee. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (804) 236-1091.

COMMUNICATIONS: ATIS 119.15 UNICOM 122.95

FLAT ROCK RCO 122.1R 113.3T (LEESBURG RADIO)

RCO 122.4 122.2 122.1R 114.1T (LEESBURG RADIO)

(R) POTOMAC APP CON 126.4 (031°-170°) 134.7 (171°-320°) 126.8 (321°-030°) 118.2

TOWER 121.1 GND CON 121.9 POTOMAC CLNC DEL 127.55

(R) POTOMAC DEP CON 126.4 (031°-170°) 134.7 (171°-320°) 126.8 (321°-030°)

AIRSPACE: CLASS C svc continuous ctc **APP CON**

RADIO AIDS TO NAVIGATION: NOTAM FILE RIC.

(H) VORTAC 114.1 RIC Chan 88 N37°30.14' W77°19.22' at fld. 159/09W.

ILS 110.9 I-EZD Rwy 02. Class IT.

ILS 110.7 I-BNE Rwy 34. Class IIIIE.

ILS 110.7 I-RGJ Rwy 16. Class IA.

RICHMOND/ASHLAND

HANOVER CO MUNI (OPF) 8 N UTC-5(-4DT) N37°42.54' W77°26.20'

207 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 TPA—1007(800) NOTAM FILE OPF H-10H, 12I, L-34E, 36H
RWY 16-34: H5402X100 (ASPH-PFC) S-40 MIRL

RWY 16: REIL, PAPI(P4L). Tree. RWY 34: REIL, Trees.

AIRPORT REMARKS: Attended 1200–0000Z+. For acft svcs call

804–798–6500. Deer and birds on and invof arpt. Noise sensitive area S of arpt. ACTIVATE MIRL Rwy 16–34; REIL Rwy 16 and 34—CTAF.

WEATHER DATA SOURCES: ASOS 119.025 (804) 752–2902 (Except thunderstorm.)

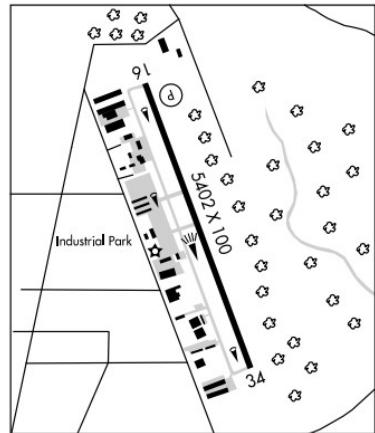
COMMUNICATIONS: CTAF/UNICOM 122.7

(R) **POTOMAC APP/DEP CON** 134.7 **POTOMAC CLNC DEL** 125.4

RADIO AIDS TO NAVIGATION: NOTAM FILE RIC.

RICHMOND (H) VORTAC 114.1 RIC Chan 88 N37°30.14' W77°19.22' 345° 13.6 NM to fld. 159/09W.

ILS/DME 109.7 I-OPF Chan 34 Rwy 16. LOC only. LOC unmonitored when arpt unattended.

**ROANOKE RGNL/WOODRUM FIELD** (ROA) 3 NW UTC-5(-4DT)

N37°19.53' W79°58.53'

1175 B S4 FUEL 100LL, JET A OX 1, 2, TPA—1975(800) NOTAM FILE ROA

RWY 06-24: H6800X150 (ASPH-GRVD) S-150, D-200, 2S-175, 2D-310 HIRL

RWY 06: REIL, MALSR, VASI(V4L)—GA 3.0°TCH 58'.

RWY 24: REIL, Thld dispclcd 790'.

RWY 15-33: H5810X150 (ASPH-GRVD) S-150, D-200, 2S-175, 2D-310 HIRL 0.4% up NW

RWY 33: MALSR, PAPI (P4L)—GA 3.0° TCH 63'. Tower.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 06: TORA-6800 TODA-6800 ASDA-6800 LDA-6800

RWY 15: TORA-5810 TODA-5810 ASDA-5810 LDA-5810

RWY 24: TORA-6800 TODA-6800 ASDA-6800 LDA-6010

RWY 33: TORA-5810 TODA-5810 ASDA-5810 LDA-5810

ARRESTING GEAR/SYSTEM

RWY 33: EMAS

AIRPORT REMARKS: Attended continuously. Large flocks of birds invof arpt. Take off Rwy 33 and landings Rwy 15 not authorized at night nor during IFR conditions due to terrain. Transient pilots ctc FBO UNICOM freq 122.95 for acft parking and escort.

WEATHER DATA SOURCES: ASOS (540) 265–0680. LLWAS.

COMMUNICATIONS: ATIS 134.95 UNICOM 122.95

ROANOKE RGNL APP/DEP CON 122.6 122.2 122.1R 109.4T (LEESBURG RADIO)

(R) **ROANOKE APP/DEP CON** 126.9 (Rwy 15–33 151°–359°, Rwy 06 075°–234°) 118.15 (Rwy 15–33 360°–150°, Rwy 06 235°–074°)

TOWER 118.3 GND CON 121.9 CLNC DEL 119.7

AIRSPACE: CLASS C svc continuous ctc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE ROA.

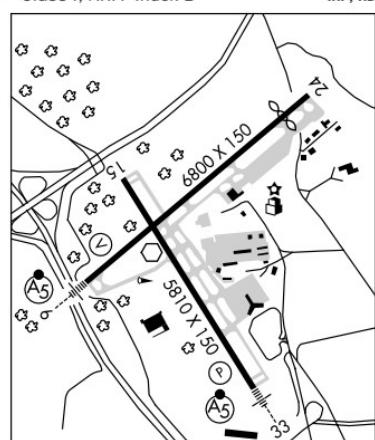
(L) **VORTAC** 109.4 ROA Chan 31 N37°20.61' W80°04.23' 107° 4.7 NM to fld. 3060/04W.
 DME unusable 270°–005° beyond 20 NM below 6000'.

WOODRUM (T) VORW 114.9 ODR N37°19.45' W79°58.74' at fld.

VINTON NDB (MHW) 277 VIT N37°12.24' W79°52.90' 334° 8.6 NM to fld. NDB unusable beyond 11 NM.

ILS 109.7 I-ROA Rwy 33. CLASS IB.

LDA/DME 111.1 I-SZK Chan 48 Rwy 06. LDA located 1202' inboard of Rwy 06 thld and 1100' right of rwy centerline, offset angle 14° 41". GS aimed parallel to localizer course. ILS unusable 1.4 DME (JOKNI) inbound. DME unusable byd 30° left of course.

**RONALD REAGAN WASHINGTON NATL** (See DISTRICT OF COLUMBIA, WASHINGTON)

SALUDA

HUMMEL FLD (W75) 6 E UTC-5(-4DT) N37°36.15' W76°26.80'

30 B S4 FUEL 100LL NOTAM FILE DCA

RWY 01-19: H2270X45 (ASPH) S-12.5 MIRL 0.3% up S

RWY 01: APAP(PNLL). Thld dsplcd 135'. Road.

RWY 19: APAP(PNIR). Tree.

AIRPORT REMARKS: Attended 1300-2100Z‡. Unattended Thanksgiving and Christmas day. Drainage swales full length of rwy on both sides. Use of exit in front of Hummel Aviation advised. Birds and deer on and invof arpt during winter. Acft hold short 75 ft of existing NSTD hold position bars. Departing Rwy 01-19 climb to 500 ft before any turn out; arriving acft use wide pattern to avoid populated areas E and W of arpt. Rwy 01 has NSTD thld lghts, has second set of green lghts. Rwy 01 has NSTD dsplcd thld markings. Rwy 19 has NSTD markings. No thld bar. Previous markings visible certain lgtg conditions. ACTIVATE MIRL Rwy 01-19—CTAF.

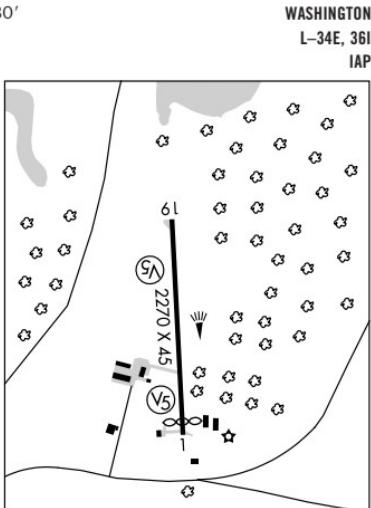
COMMUNICATIONS: CTAF/UNICOM 123.0

(R) NORFOLK APP/DEP CON 126.05

RADIO AIDS TO NAVIGATION: NOTAM FILE RDU.

HARCUM (L) VORTAC 108.8 HCM Chan 25 N37°26.92'

W76°42.68' 061° 15.6 NM to fld. 8/07W.



SHANNON (See FREDERICKSBURG)

SHENANDOAH VALLEY RGNL (See STAUNTON/WAYNESBORO/HARRISONBURG)

SMITH MOUNTAIN LAKE (See MONETA)

SOUTH BOSTON N36°40.50' W79°00.87' NOTAM FILE DCA.

(L) VORTAC 110.4 SBV Chan 41 080° 8.3 NM to William M. Tuck. 530/05W.

RCO 122.1R 110.4T (LEESBURG RADIO)

WASHINGTON

H-9C, L-26J, 36G

SOUTH BOSTON

WILLIAM M TUCK (W78) 3 E UTC-5(-4DT) N36°42.56' W78°50.90'

420 B S4 FUEL 100LL TPA-1220(800) NOTAM FILE DCA

RWY 01-19: H4003X75 (ASPH) S-12.5 MIRL 0.9% up N

RWY 01: REIL. PAPI(P2L)—GA 30° TCH 52'. Tree.

RWY 19: REIL. PAPI(P2L)—GA 3.0° TCH 52'. Hill.

RWY 06-24: 2065X200 (TURF) 0.4% up NE

RWY 06: Trees.

RWY 24: Tree.

AIRPORT REMARKS: Attended 1300-2230Z‡. Terminal open-unattended. Self-fueling with credit card. Deer on and invof rwys. Rwy 05 outlined with yellow cones. Rwy 01 REIL OTS indef. ACTIVATE MIRL Rwy 01-19, REIL Rwy 01 and Rwy 19—CTAF. PAPI Rwy 01 and Rwy 19 opr continuously.

COMMUNICATIONS: CTAF/UNICOM 122.8

SOUTH BOSTON RCO 122.1R 110.4T (LEESBURG RADIO)

WASHINGTON CENTER APP/DEP CON 124.05

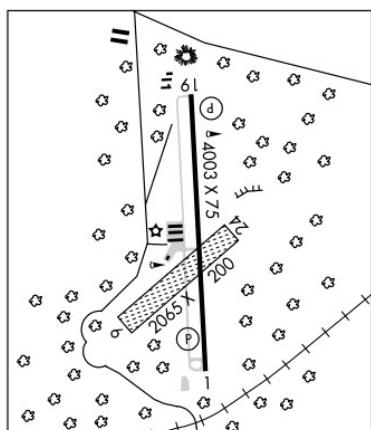
RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

SOUTH BOSTON (L) VORTAC 110.4 SBV Chan 41 N36°40.50'

W79°00.87' 081° 8.3 NM to fld. 530/05W.

WASHINGTON

L-26J, 36G



SOUTH HILL**MECKLENBURG-BRUNSWICK RGNL**

(AVC) 4 SE UTC-5(-4DT)

N36°41.30' W78°03.27'

441 B FUEL 100LL, JET A TPA—1841(1400) LRA NOTAM FILE AVC

RWY 01-19: H5002X75 (ASPH) S-12.5 MIRL 1.3% up N

RWY 01: REIL. PAPI(P2L)—GA 3.0°. TCH 40'. Trees.

RWY 19: REIL. PAPI(P2L)—GA 3.0°. TCH 40'. Antenna.

AIRPORT REMARKS: Attended dalgt hours. 24 hr fuel avbl by credit card.

MIRL Rwy 01-19 and REIL Rwy 01 and 19 preset low ints; for higher ints ACTIVATE—CTAF.

WEATHER DATA SOURCES: AWOS-3 127.525 (434) 729-2229.

COMMUNICATIONS: CTAf/UNICOM 122.8

⑧ WASHINGTON CENTER APP/DEP CON 118.75

RADIO AIDS TO NAVIGATION: NOTAM FILE FKN.

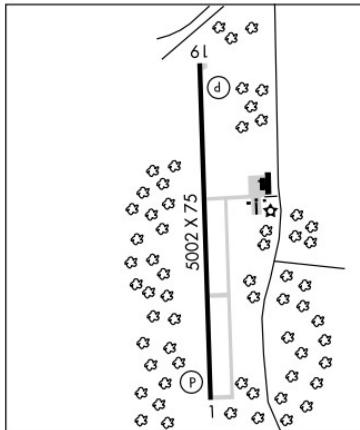
FRANKLIN (L) VORTAC 110.6 FKN Chan 43 N36°42.85'
W77°00.74' 278° 50.3 NM to fld. 90/09W.JONES NDB (MHW) 373 AEA N36°36.87' W78°03.19' 008° 4.4
NM to fld. NOTAM FILE AVC.

ILS 110.5 I-AVC Rwy 01. Localizer only.

WASHINGTON

H-9C, 12H, L-36G

IAP

**STAFFORD RGNL** (RMN) 3 SW UTC-5(-4DT) N38°23.89' W77°27.33'

211 B FUEL 100LL, JET A, A+ NOTAM FILE RMN

RWY 15-33: H5000X100 (ASPH-GRVD) S-30, D-70, 2S-89 HIRL

RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 45'. Ground. Rgt tfc.

RWY 33: MALS. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

AIRPORT REMARKS: Attended 1200-0000Z‡. Unattended Thanksgiving, Christmas and New Years days. Government contract fuel. Fuel avbl until 0000Z‡, after hrs call 540-288-3838 within 12 hrs notice. Deer and flocks of birds on and inov apt. "Fly Friendly" program in effect, requested that touch and go activity be limited to two (2) every half hr. ACTIVATE HIRL Rwy 15-33—CTAF.

WEATHER DATA SOURCES: AWOS-3 126.325 (540) 657-8283.

COMMUNICATIONS: CTAf/UNICOM 122.725

⑧ QUANTICO ARRIVAL 127.05 (Mon and Fri 1300-2200Z‡, Tue, Wed and Thu 1300-0200Z‡, except Sat, Sun and holidays, other times ctc) ⑧ POTOMAC APP/DEP CON 124.65

GCO 135.075 (Quantico and Potomac App Con)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

BROOKE (L) VORTAC 114.5 BRV Chan 92 N38°20.18'

W77°21.18' 316° 6.1 NM to fld. 145/09W.

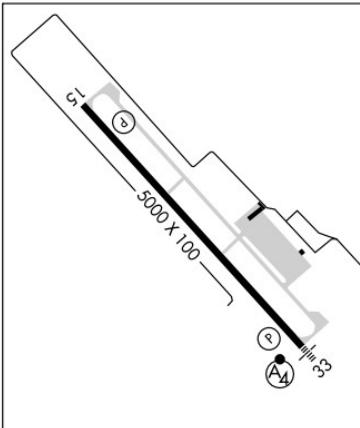
ILS/DME 108.75 I-RMN Chan 24(Y) Rwy 33. LOC unusable byd 20° left of course.

WASHINGTON

H-10H, 12I, L-29E, 34E, 36I, A

IAP

0.8% up NW.



STAUNTON/WAYNESBORO/HARRISONBURG

SHENANDOAH VALLEY RGNL (SHD) 10 NE UTC-5(-4DT) N38°15.83' W78°53.79'
1201 B S4 FUEL 100LL, JET A OX 3, 4 TPA—See Remarks NOTAM FILE SHD
WASHINGT Class I, ARFF Index B H-10H, 12I, L-26J IAP

RWY 05-23: H6002X150 (ASPH-GRVD) S-75, D-150, 2S-175,
 2D-215 HIRL 0.4% up NE

RWY 05: MALS R. PAPI(P4L)—GA 3.0°TCH 60'. Pole.

RWY 23: REIL. PAPI(P4L)—GA 3.0°TCH 45'. Road.

AIRPORT REMARKS: Attended continuously. PPR 12 hrs for air carrier ops with more than 30 passenger seats call 540-234-8304. TPA 2001(800) piston acft, 2701(1500) jet/turbo acft.
 ACTIVATE HIRL Rwy 05-23, MALS Rwy 05, REIL Rwy 23 and taxiway lghts—CTAF.

WEATHER DATA SOURCES: AWOS-3 124.925 (540) 234-0110.

COMMUNICATIONS: CTAF/UNICOM 123.0

MONTEBELLO RCO 122.1R 115.3T (LEESBURG RADIO)

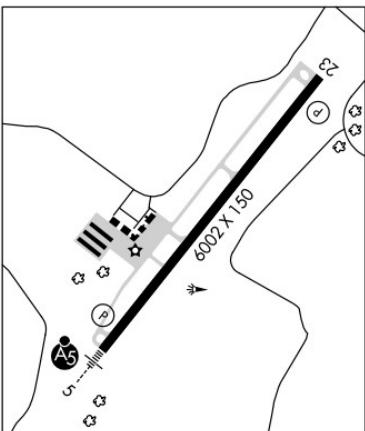
(R) **POTOMAC APP/DEP CON 132.85**

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

MONTEBELLO (L) VOR/DME 115.3 MOL Chan 100 N37°54.03'
 W79°06.41' 030° 23.9 NM to fld. 3460/05W.

STAUT NDB (LOM) 375 SH N38°12.11' W78°57.44' 045° 4.7
 NM to fld.

ILS 109.5 I-SHD Rwy 05. Class IE. LOM STAUT NDB.
 Backcourse unusable. Autopilot coupled apchs not applicable blo 1494'.



STAUT N38°12.11' W78°57.44' NOTAM FILE SHD.

NDB (LOM) 375 SH 045° 4.2 NM to Shenandoah Valley Rgnl.

SUFFOLK EXECUTIVE (SFQ) 3 SW UTC-5(-4DT) N36°40.94' W76°36.11'

WASHINGTON
 H-10I, 12I, L-35D, 36H
 IAP

72 B S2 FUEL 100LL, JET A, MOGAS NOTAM FILE SFQ

RWY 04-22: H5007X100 (ASPH) S-30, D-60, 2D-60 HIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0°TCH 38'. Trees. Rgt tfc.

RWY 22: REIL. PAPI(P4L)—GA 3.0°TCH 40'. Trees.

RWY 07-25: H4700X100 (ASPH) S-30, D-50, 2D-85 MIRL

RWY 07: APAP(PNLL). Thld dsplcd 950'. Tree.

RWY 25: APAP(PNIR). Thld dsplcd 300'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended Apr-May 1300-2300Z‡, except Sun clsd at 2200Z‡, Jun-Oct 1300-0000Z‡, except Sun clsd at 2200Z‡, Nov-Mar 1300-2200Z‡. Parachute Jumping. Deer on and invof apt. Rwy 07-25 relocated 300 ft on east end. ACTIVATE MIRL Rwy 07-25; HIRL Rwy 04-22; PAPI Rwy 04 and 22; REIL Rwy 04 and 22—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.375 (757) 934-3942

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) **NORFOLK APP/DEP CON 127.9 GCO 135.075 (NORFOLK CLNC)**

RADIO AIDS TO NAVIGATION: NOTAM FILE FKN.

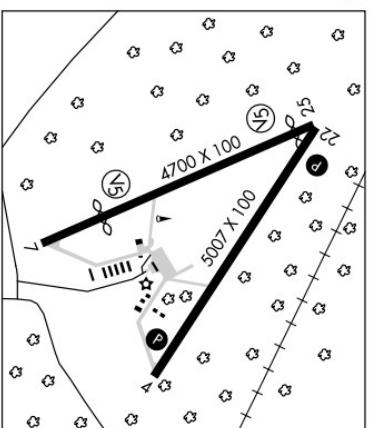
FRANKLIN (L) VORTAC 110.6 FKN Chan 43 N36°42.85'

W77°00.74' 104° 19.9 NM to fld. 90/09W.

WALEY NDB (MHW/LOM) 249 RK N36°35.96' W76°38.95' 035°

5.5 NM to fld. NOTAM FILE DCA.

ILS 111.5 I-RKH Rwy 04. Loc only.



SUZZE N36°55.21' W81°14.60' NOTAM FILE MKJ.

NDB (MHW/LOM) 335 MK 260° 5.4 NM to Mountain Empire. Unmonitored when apt unattended.

CINCINNATI

L-26I

TANGIER ISLAND (TGI) 4 W UTC-5(-4DT) N37°49.51' W75°59.87'

WASHINGTON

L-34E, 36I

IAP

5 B TPA—See Remarks NOTAM FILE DCA

RWY 02-20: H2950X75 (ASPH) S-12.5

RWY 02: Tree. Rgt tfc. **RWY 20:** Thld dsplcd 99'. Road.

AIRPORT REMARKS: Attended Apr-Oct Sat-Sun 1300-2130Z‡. Arpt

CLOSED SS-SR daily. Be alert Restricted Area 1 mile west of arpt, hi-speed acft drop bombs and fire live ammunition in area. PAEW adjacent to all rwys, twys and ramps. TPA—605(600) light acft, 1505(1500) heavy acft. Ldg/Parking fee to help pay for rwy rehabilitation. Rotating bcn ops on req (emerg only through arpt manager—CTAF or phone 757-891-2496). Ldg fee.

COMMUNICATIONS: CTAF/UNICOM 122.8

CAPE CHARLES RCO 122.1R 112.2T (LEESBURG RADIO)

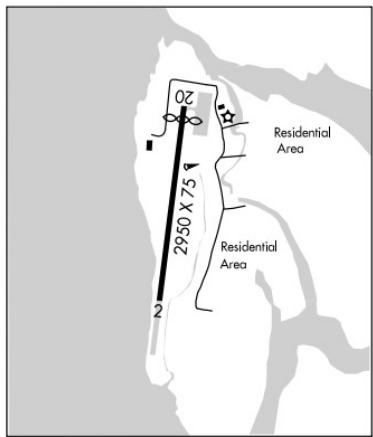
(R) PATUXENT APP/DEP CON 121.0 (Mon-Fri 1200-0400Z‡, Sat-Sun 1300-2300Z‡, clsd holidays)

(R) WASHINGTON CENTER APP/DEP CON 133.9 (Mon-Fri 0400-1200Z‡, Sat-Sun 2300-1300Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

CAPE CHARLES (L) VORTAC 112.2 CCV Chan 59 N37°20.85'

W75°59.86' 010° 28.6 NM to fld. 10/10W.



TAPPAHANNOCK-ESSEX CO (XSA) 5 S UTC-5(-4DT) N37°51.58' W076°53.65'

WASHINGTON

L-34E, 36I

IAP

135 B FUEL 100LL NOTAM FILE DCA

RWY 10-28: H4300X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(2PL)—GA 3.0° TCH 40'. Tree.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree.

AIRPORT REMARKS: Attended Nov-Feb 1300-2300Z‡. Mar-Oct

1400-0000Z‡. Deer on and invof arpt. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and rotating bcn—CTAF.

WEATHER DATA SOURCES: AWOS-3 125.775 (804) 445-8724.

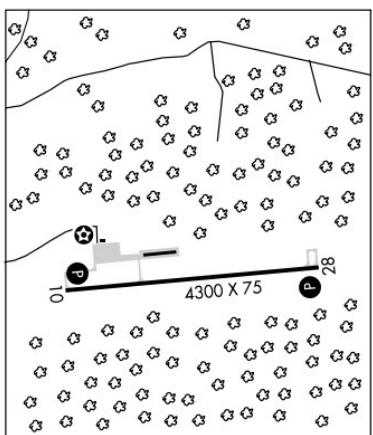
COMMUNICATIONS: CTAF/UNICOM 122.8

(R) POTOMAC APP/DEP CON 126.4

RADIO AIDS TO NAVIGATION: NOTAM FILE RIC.

RICHMOND (H) VORTAC 114.1 RIC Chan 088 N37°30.14'

W077°19.22' 052° 29.5 NM to fld. 159/9W.



TAZEWELL CO (See RICHLANDS)

TECH N37°12.52' W80°24.21' NOTAM FILE BCB.

CINCINNATI

NDB (MHW) 368 TEC at Virginia Tech/Montgomery Executive.

L-26I

TURNER FLD (See QUANTICO MCAF)

TWIN CO (See GALAX/HILLSVILLE)

VINTON N37°12.24' W79°52.90' NOTAM FILE ROA.

CINCINNATI

NDB (MHW) 277 VIT 334° 8.6 NM to Roanoke Rgnl/Woodrum Field.

L-26J

NDB unusable beyond 11 NM.

VIRGINIA HIGHLANDS (See ABINGDON)

VIRGINIA TECH/MONTGOMERY EXECUTIVE (See BLACKSBURG)

WAKEFIELD MUNI (AKQ) 2 NW UTC-5(-4DT) N36°59.23' W77°00.07'

WASHINGTON

L-36H

113 B FUEL 100LL NOTAM FILE AKQ

RWY 02-20: H4337X75 (ASPH) S-12.5 MIRL

RWY 02: APAP(PNIL). GA 3.0° TCH 17'. Thld dsplcd 298'. Trees.

RWY 20: APAP(PNIL)—GA 3.0° TCH 17'. Thld dsplcd 470'. Trees.

AIRPORT REMARKS: Attended irregularly. For fuel after hours call

757-899-6066. Apron pavement cracked and in poor condition.

WEATHER DATA SOURCES: ASOS 128.325 (757) 899-2300.

COMMUNICATIONS: CTAf/UNICOM 122.8

FRANKLIN RCO 122.1R 110.6T (LEESBURG RADIO)

(R) NORFOLK APP/DEP CON 127.9

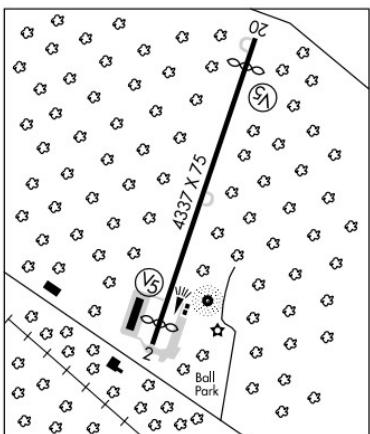
RADIO AIDS TO NAVIGATION: NOTAM FILE FKN.

FRANKLIN (L) VORTAC 110.6 FKN Chan 43 N36°42.85'

W77°00.74' 011° 16.4 NM to fld. 90/09W.

NDB (MHW) 274 AKQ N36°58.99' W77°00.07' at fld. NOTAM

FILE AKQ. Unmonitored. Unusable byd 10 NM.



WALEY N36°35.96' W76°38.95' NOTAM FILE DCA.

WASHINGTON

L-35C, 36H

NDB (MHW/LOM) 249 RK 035° 5.5 NM to Suffolk Executive.

WALLOPS FLIGHT FACILITY (WAL)(KWAL) NASA 5 S UTC-5(-4DT) N37°56.41' W75°27.98'

WASHINGTON

H-10I, 12I, L-36I

IAP, AD

40 B TPA-1040 (1000) NOTAM FILE DCA

RWY 04-22: H8749X150 (PEM) S-57, D-115, 2S-146, 2D-225 HIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0° RWY 22: REIL. PAPI(P4L)—GA 3.0°

RWY 10-28: H8005X200 (ASPH) S-57, D-115, 2D-225 HIRL.

RWY 10: REIL. PAPI(P4L)—GA 3.0° RWY 28: REIL. PAPI(P4L)—GA 3.0°

RWY 17-35: H4808X150 (ASPH) S-15, D-40, 2D-75 HIRL

RWY 17: REIL. PAPI(P4L)—GA 3.0° RWY 35: REIL. PAPI(P4L)—GA 3.0°

ARRESTING GEAR SYSTEM

RWY 04 HOOK BAK -13(B) (1850)

HOOK BAK-13(B) (1500) RWY 22

MILITARY SERVICE: LGT ACTIVATE rwy lgts and rotating bcn—CTAF. JASU 3(A/M32A-86) 1 (AM32A-60A) FUEL J5.

Restricted to U.S. government acft on official business only. FLUID SP PRESAIR

MILITARY REMARKS: RSTD Official business only. PPR 757-824-1688. CAUTION Roadways cross Rwy 17-35. High seagull bird strike potential. Extensive research test development in progress. Trees right of Rwy 22 thld.

Numerous radar facilities at arpt with possible radio freq hazard to ordnance. Rwy 04 HOOK BAK-13 and Rwy 22 HOOK BAK-13 OTS indef.

WEATHER DATA SOURCES: ASOS 119.175 (757) 824-0820

COMMUNICATIONS: CTAf 126.5

PATUXENT APP/DEP CON 127.95 (Mon-Fri 1200-0400Z‡, Sat-Sun 1300-2300Z‡, clsd holidays)

WASHINGTON CENTER APP/DEP CON 132.55 (Mon-Fri 0400-1200Z‡, Sat-Sun 2300-1300Z‡)

TOWER 126.5 Mon-Fri 1200-2200Z‡ except Federal holidays. GND CON 127.875 CLNC DEL 121.7 INFO SVC 126.5 (2230-1200Z‡)

AIRSPACE: CLASS D Mon-Fri 1200-2200Z‡ except Federal holidays other times Class E.

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

SNOW HILL (L) VORTAC 112.4 SWL Chan 71 N38°03.40' W75°27.84' 189° 7.0 NM to fld. 40/8W.

WARRENTON-FAQUIER (HWY) 12 SE UTC-5(-4DT) N38°35.18' W77°42.64'

336 B S4 FUEL 100LL, JET A NOTAM FILE DCA

RWY 15-33: H5000X100 (ASPH-GRVD) S-15, D-70 HIRL 0.5% up SE

RWY 15: REIL, PAPI(P4L)—GA 3.0° TCH 53'. Tree.

RWY 33: REIL, PAPI(P4L)—GA 3.0° TCH 40'.

AIRPORT REMARKS: Attended 1300Z—dark. Ultralight activity on and invof arpt. Aerobatic activity (3 boxes avbl). Aerobatic demo area within 1.5 NM radius of arpt 3500 ft and bld; 1500–0300Z. ACTIVATE HIRL Rwy 15-33—CTAF.

WEATHER DATA SOURCES: ASOS 120.350 (540) 788-4078.

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) POTOMAC APP/DEP CON 124.65

GCO 135.075 (POTOMAC CLNC)

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

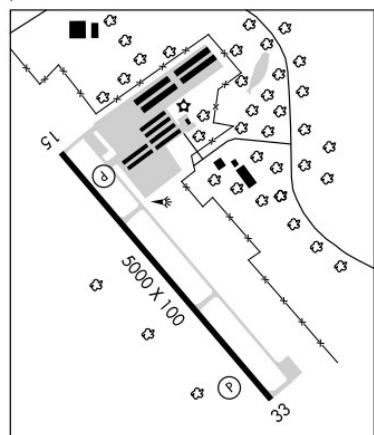
CASANOVA (H) VORTAC 116.3 CSN Chan 110 N38°38.47'

W77°51.93' 120° 8.0 NM to fld. 439/06W.

WASHINGTON

H-10H, 12I, L-29E, 34E, 36I, A

IAP



WASHINGTON-DULLES INTL (See DISTRICT OF COLUMBIA, WASHINGTON)

WAYNESBORO

EAGLE'S NEST (W13) 3 W UTC-5(-4DT) N38°04.62' W78°56.65'

1437 B S4 FUEL 100LL NOTAM FILE DCA

RWY 06-24: H2009X50 (ASPH) MIRL (NSTD)

RWY 06: Tree. RWY 24: Tree.

AIRPORT REMARKS: Attended 1300–2200Z. Parachute Jumping. Deer on and invof arpt. Glider activity on and invof arpt. Numerous cracks along rwy. Some cracks have seperated up to 4 inches. Acft parked adjacent to rwy.

ACTIVATE MIRL Rwy 06-24—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.05

WASHINGTON

WEIRWOOD

CAMPBELL FLD (9VG) 1 W UTC-5(-4DT) N37°27.51' W075°52.73'

40 NOTAM FILE DCA

RWY 03-31: 3000X100 (TURF)

RWY 03: P-line.

RWY 14-32: 1455X140 (TURF)

AIRPORT REMARKS: Attended Mar-Nov dalg hours. Be alert: 60' P-lines located 300' southwest off the AER 03.

COMMUNICATIONS: CTAF 122.8

WASHINGTON

WINCHESTER RGNL (OKV) 3 SE UTC-5(-4DT) N39°08.61' W78°08.67'
 726 B S4 FUEL 100LL, JET A TPA-See Remarks LRA NOTAM FILE OKV
RWY 14-32: H5500X100 (ASPH-GRVD) S-45, D-60 MIRL 0.5% up NW

WASHINGTON
 H-10H, 12I, L-29D, A
 IAP

RWY 14: REIL. PAPI(P2L)—GA 3.0°TCH 45'. Tree.

RWY 32: MALSR. PAPI(P2L)—GA 3.0°TCH 45'. Tree.

AIRPORT REMARKS: Attended 1200-0000Z‡. Deer on and invof arpt.

Taxi on pavement only. Medical Flight: irregular departure pat.

ACTIVATE MIRL Rwy 14-32, REIL Rwy 14 and MALSR Rwy 32—CTAF. TPA 2706 (1980) turbo prop and jet acft, 1706 (980) other acft. Flight Notification Service (ADCUS) available. ADCUS avbl 24 hours minimum advance notice required call 804-661-3660 Mon-Fri, after hours and weekends call 703-661-3632.

WEATHER DATA SOURCES: AWOS-3 124.85 (540) 662-6970.

COMMUNICATIONS: CTAF/UNICOM 122.7

② POTOMAC APP/DEP CON 120.45 CLNC DEL 126.15

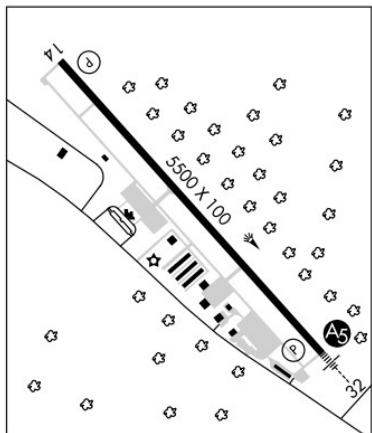
RADIO AIDS TO NAVIGATION: NOTAM FILE MRB.

MARTINSBURG (L) VORTAC 112.1 MRB Chan 58 N39°23.13'

W77°50.90' 231° 20 NM to fld. 600/07W.

ILS/DME 109.55 I-TZX Chan 32Y Rwy 32. CLASS IB.

Unmonitored when arpt unattended.



WISE

LONESOME PINE (LNP) 3 NE UTC-5(-4DT) N36°59.25' W82°31.80'

2684 B FUEL 100LL, JET A NOTAM FILE LNP

CINCINNATI

H-9B, 12H, L-26H

RWY 06-24: H5280X100 (ASPH-GRVD) S-42, D-55, 2D-100 MIRL 0.3% up NE

IAP

RWY 06: REIL. PAPI(P2L)—GA 3.0°TCH 40'. Tree.

RWY 24: REIL. ODALS (NSTD). PAPI(P2R)—GA 3.0°TCH 36'. Trees.

AIRPORT REMARKS: Attended Apr-Oct Mon-Sat 1300-0000Z‡, Sun irregularly, Nov-Mar Mon-Sat 1300-2230Z‡, Sun irregularly. Rwy 06-24—three inch gradual dip starting 2000 ft from thld Rwy 24 continuing for 300 ft. Rwy 24 NSTD ODALS, 5 lgt configuration. ACTIVATE MIRL Rwy 06-24, ODALS Rwy 24 and REIL Rwy 06 and Rwy 24—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.6 (276) 328-3727.

COMMUNICATIONS: CTAF/UNICOM 123.0

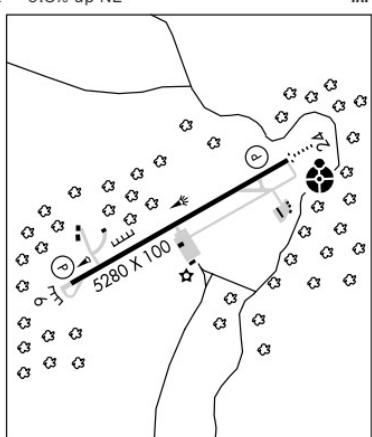
② INDIANAPOLIS CENTER APP/DEP CON 126.57

RADIO AIDS TO NAVIGATION: NOTAM FILE DCA.

GLADE SPRING (L) VOR/DME 110.2 GZG Chan 39 N36°49.51'

W82°04.74' 296° 23.8 NM to fld. 4200/02W. HIWAS.

ILS/DME 110.7 I-OWN Chan 44 Rwy 24.



WOODRUM N37°19.45' W79°58.74' NOTAM FILE ROA.

CINCINNATI

L-26

(T) VORW 114.9 ODR at Roanoke Rgnl/Woodrum Field.

VOR unusable 035°-110° byd 10 NM blo 6500', 035°-110° byd 10 NM blo 4,200', 035°-050° byd 20 NM blo 7000', 290°-360° byd 15 NM.

**2010 U.S. & CANADIAN MILITARY AERIAL
AIRCRAFT/PARACHUTE DEMONSTRATIONS**

During calendar year 2010, the U.S. and Canadian Military Aerial Demonstration Teams (Thunderbirds, Blue Angels, Snowbirds, and Golden Knights) will be performing on the dates and locations listed below.

Pilots should expect Temporary Flight Restrictions (TFR) in accordance with 14 CFR Section 91.145, Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. The dimensions and effective times of the TFRs may vary based upon the specific aerial demonstration event and will be issued via the U.S. NOTAM system. Pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding these airspace restrictions.

The currently scheduled 2010 aerial demonstration locations, subject to change without notice, are:

DATE:	USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
September 25-26	McConnell AFB, KS	MCAS Kaneohe Bay, HI		Chico, CA
October 1-3		MCAS Miramar, CA		MCAS Miramar, CA
2-3	Salinas, CA		MCAS Miramar, CA	
2-3			Jackson, MS	
9-10	Little Rock AFB, AR	San Francisco, CA	Little Rock, AFB, AR	Daytona Beach, FL
16-17	EI Paso, TX	Dobbins AFB, GA	EI Paso, TX	Atlanta, GA
23-24	Houston, TX	NAS Jacksonville, FL	Washington, DC	
30-31	Cocoa Beach, FL	Ft Worth Alliance, TX	Ft Worth Alliance, TX	
November 6-7	Lackland AFB, TX	Homestead ARB, FL	Lackland AFB, TX	
6-7			Homestead ARB, FL	
11-14			Ft Bragg, NC	
12-13		NAS Pensacola, FL		
13-14	Nellis AFB, NV			

Note: Dates and locations are scheduled "show dates" only and do not reflect arrival or practice date TFR periods that may precede the specific aerial demonstration events listed above. Again, pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding any airspace restrictions.



Washington DC SFRA Special Terms & Procedures

Procedures for Traffic Pattern Work:

Towered Airport: Request pattern work from tower; squawk 1234, remain in two-way communication with tower.

Non-Towered Airport: File DC SFRA flight plan; obtain and squawk discrete transponder code, communicate pattern position via published CTAF, and have ability to monitor VHF guard on 121.5 or UHF guard on 243.0

ATC Terms Specific to the DC SFRA:

Security services: Identification, communications and security tracking provided by an ATC facility in support of DOD, or other security elements. *NOTE: Security services do not include basic radar services or any other ATC services.*

Transponder observed: Used to inform a pilot that the aircraft's assigned beacon code and position has been observed. This transmission does *not* imply ATC services. It conveys only that the transponder reply has been observed and its position correlated for movement through security airspace.

Remain on the code until you land: Used when Potomac hands an inbound VFR flight off to the tower or authorizes change to advisory frequency for non-towered airports. It reminds pilots to remain on the assigned discrete transponder code until after landing. *NEVER squawk 1200 inside the DC SFRA.*

Emergency Procedures:

Transponder failure: An aircraft unable to transmit the ATC-assigned transponder code must contact ATC and comply with all instructions. If unable to contact ATC, the aircraft must exit the DC SFRA by the most direct lateral route.

Intercepts: Review interception procedures in the AIM. If you are intercepted, follow all instructions given by the intercepting aircraft. Monitor 121.5, provide call sign / position, and squawk 7700 unless otherwise directed.

Potomac TRACON Telephone Numbers

Area Name	Nearest major airport)	Telephone
Shenandoah	Dulles (IAD)	1-866-709-4993 1-540-349-4097
Mount Vernon	Reagan National (DCA) Andrews AFB (ADW)	1-866-599-3874 1-540-349-0493
Chesapeake	Baltimore (BWI)	1-866-429-5882 1-540-349-8478
James River	Richmond (RIC) Charlottesville (CHO)	1-866-640-4124 1-540-349-9697



Washington DC SFRA Standard Requirements

**Requirements to operate to/from, or within the DC SFRA
(effective 0001 EST 17 February 2009)**

1. Two-way radio
2. Operating transponder with altitude reporting (Mode C)
3. Flight plan appropriate to intended operation:
 - IFR: IFR flight plan
 - VFR: DC SFRA flight plan for all operations, *except*:
 - Fringe airport egress (*no flight plan required*)
 - Towered airport pattern work (*make request to tower*)
4. Discrete transponder code for all operations, *except*:
 - Leesburg (JYO) ingress (1227) or egress (1226)
 - Fringe airport egress (1205)
 - Towered airport pattern work (1234)
5. VFR speed restriction (\leq 180 KIAS in DC SFRA, & \leq 230 KIAS from 30 NM - 60 NM from DCA VOR/DME unless otherwise authorized.)
6. Communication with ATC for all operations, *except*:
 - Leesburg (JYO) ingress/egress: make CTAF calls
 - Fringe airport egress: monitor guard if able
 - Towered airport pattern work: talk to tower
 - Non-towered airport pattern work:
 - Make CTAF calls & monitor guard if able

Activate: A DC SFRA flight plan to enter/exit the DC SFRA under VFR activates when the pilot obtains a discrete transponder code *except*:

- Leesburg (JYO) ingress/egress: with CTAF calls
- Fringe airport egress: when pilot squawks 1205
- Towered airport pattern: with squawk & talk
- Non-towered airport pattern: with CTAF calls

Closing: The DC SFRA flight plan closes when the aircraft exits or lands at an airport inside the DC SFRA.

Washington DC SFRA

VFR Outbound Procedures*

Step 1: Preflight—File a DC SFRA Flight Plan

- ALWAYS review NOTAMs for current TFR information.
- File DC SFRA flight plan.
“I would like to file a DC SFRA flight plan for VFR flight from (departure airport) to (appropriate exit gate)”
- If desired, file separate VFR flight plan (search-and-rescue) to be activated after exiting the DC SFRA.

Step 2: Pre-Takeoff — Activate DC SFRA Flight Plan

- Call ATC (tower, RCO, phone) for frequency & squawk.
“Potomac Clearance, (call sign) at Tipton, VFR departure.”
- Set assigned frequency & transponder code.
- Verify that Mode C (ALT) is on.

Step 3: After Takeoff—Communicate w/ ATC

- Establish radio contact with Potomac TRACON.
“Potomac Departure, (call sign), off Tipton”
- Monitor assigned frequency
- Remain out of Class B unless explicitly cleared to enter.

Step 4: Exiting—Close DC SFRA Flight Plan

- Remain on frequency/squawk until ATC authorizes change; DC SFRA flight plan closes upon exiting the DC SFRA.



ALWAYS check NOTAMS!

2
rev. 02/06/2010

Washington DC SFRA VFR Inbound Procedures*

Step 1: Preflight—File a DC SFRA Flight Plan

- **ALWAYS** review NOTAMs for current TFR information.
- File DC SFRA flight.
 “I would like to file a DC SFRA flight plan for VFR flight from (appropriate entry gate) to (destination airport).”

Step 2: Before Entry - Activate DC SFRA Flight Plan

- Before entry, call Potomac to request transponder code.
 “**Potomac Approach, (call sign), VFR inbound to Gaithersburg.**”
- Set assigned code and verify that Mode C (ALT) is on.
- Continue inbound unless otherwise instructed.
- Remain out of Class B unless explicitly cleared to enter.

Step 3: After Entry—Communicate w/ ATC

- Monitor Potomac TRACON.
- Remain out of Class B airspace unless explicitly cleared to enter.

Step 4: Arriving—Close DC SFRA Flight Plan

- Change to tower / advisory frequency when so instructed .
- Remain on assigned transponder code until you land.
- DC SFRA flight plan closes upon landing.

Entry/Exit Filing Gates for DC SFRA Flight Plans

Gate (Freq)	Defining Radials (DCA)		Visual Checkpoints	
WOOLY (132.775)	R-341	R-044	I-270	I-95
PALEO (132.775)	R-045	R-119	I-95	Abeam Chesapeake Beach
WHINO (125.125)	R-120	R-172	Abeam Chesapeake Beach	Northern boundary Wicomico River
GRUBY (125.125)	R-173	R-214	Northern boundary Wicomico River	Western boundary Potomac River / Widewater Beach
BRV (127.325)	R-215	R-236	Western boundary Potomac River / Widewater Beach	West side of Lunga Reservoir
FLUKY (127.325)	R-237	R-269	West side of Lunga Reservoir	VA Route 29
JASEN (127.325)	R-270	R-309	VA Route 29	VA Route 7
LUCKE (127.325)	R-310	R-339	VA Route 7	I-270

*See page 1 for JYO ingress/egress & fringe airport egress procedures.
 For detailed information, see online DC SFRA course at www.faasafety.gov

EASTON, MARYLAND NOISE ABATEMENT PROCEDURE

When Easton Airport Traffic Control Tower is closed:

Departure RWY 22: Right turn and avoid overflight of Town of Easton. Departure RWY 04: Left turn at end of RWY to parallel HWY 50 until past mobile home park.

No intersection take offs. VFR Arrivals: Report the Miles River bridge, 2.7 miles southwest of the airport at 2000' MSL for sequence to all RWYS. Contact 410-770-8055.

WEST ATLANTIC ROUTE SYSTEM (WATRS)

Effective immediately, all operators entering New York Center's West Atlantic Route System (WATRS) southbound on ATS Routes L453, L454, L455, L456, L457, L459, L461, and L462, shall file and plan the following routing.

**SOUTHBOUND
SOUTHBOUND WATRS PLUS ROUTE STRUCTURE ACCESS FROM
NEW YORK METROPOLITAN AREA**

All operators entering New York Center's West Atlantic Route System (WATRS) southbound on ATS routes: L453, L454, L455, L456, L457, L459, L461 AND L462 shall flight plan and file the following routes:

ATS ROUTE	WATRS ACCESS ROUTING (SOUTHBOUND ONLY)
For L453;	... LINND-AZEZU-L453 ...
For L453 VIA B24;	... B24-AZEZU-L453 ...
For L454;	... LINND-ROLLE-ATUGI-L454 ...
For L454 VIA B24;	... B24-WEBBB-ROLLE-ATUGI-L454 ...
For L455;	... LINND-RESQU-UMEDA-L455 ...
For L455 VIA B24;	... B24-WEBBB-RESQU-UMEDA-L455 ...
For L456;	... LINND-SQUAD-DARUX-L456 ...
For L456 VIA B24;	... B24-WEBBB-RESQU-DARUX-L456 ...
For L457;	... LINND-RESQU-UMEDA-L457 ...
For L457 VIA B24;	... B24-WEBBB-RESQU-UMEDA-L457 ...
For L459;	... LINND-SQUAD-DARUX-L459 ...
For L459 VIA B24;	... B24-WEBBB-RESQU-DARUX-L459 ...
For L461;	... LINND-KINGG-KINER-L461 ...
For L462;	... LINND-KAYYT-L462 ...
For L462 VIA ACK;	... ACK-J97-LACKS-KAYYT-L462 ...

**EASTBOUND
TRANSITION TO NEW YORK OCEANIC CTA/FIR**

VIA: ORF AR9 ZIBUT

All operators transitioning the New York Center West Atlantic Route System (WATRS) via ZIBUT intersection, en route to the New York Center North Atlantic MNPS airspace, are encouraged to flight plan via:

ZIBUT direct LARGE direct SLATN or JOBOC or DOVEY

Operators opting to flight plan via any other fix or latitude/longitude coordinates east of ZIBUT intersection shall expect no higher than FL290 and may be rerouted to accommodate WATRS non-radar traffic.

NOTE—This route may be filed bi-directionally

SPECIAL NOTICES**NORTHBOUND****NORTHBOUND WATRS PLUS ROUTE STRUCTURE ACCESS TO
NEW YORK METROPOLITAN AREA**

All northbound operators exiting New York Center's West Atlantic Route System (WATRS) on routes L453, L454, L455, L456, L457, L459, L461 AND L462 shall flight plan and file the following transition routes to join domestic routing:

ATS ROUTE	WATRS EXIT ROUTING (NORTHBOUND ONLY)
From L453;	... AZEZU-BERGH . . .
From L454;	... OKONU-L454-BERGH . . .
From L454 TO B24;	... OKONU-L454-WEBBB-B24 . . .
From L455;	... SAVIK-L455-BERGH . . .
From L455 TO B24;	... SAVIK-AZEZU-B24 . . .
From L456;	... MARIG-BERGH . . .
From L457;	... OKONU-L457-BERGH . . .
From L457 TO B24;	... OKONU-L457-WEBBB-B24 . . .
From L459;	... SAVIK-L459-BERGH . . .
From L459 TO B24;	... SAVIK-AZEZU-B24 . . .
From L461;	... MARIG-BERGH . . .
From L462;	... KAYYT-BERGH. . . or KAYYT-LACKS-ACK . . .

WAKE TURBULENCE FOR INTERSECTION DEPARTURES**Teterboro Airport (TEB)****Teterboro, New Jersey**

Teterboro Airport Traffic Control Tower has been granted a waiver to the guidelines that require a 3-minute interval for a small aircraft departing from an intersection behind a preceding departing large aircraft. This waiver authorizes the tower to depart small aircraft from the intersection of RWY 01 and Twy Kilo without requiring a 3-minute interval behind a preceding large aircraft that departs from the end of the runway.

AEROBATIC PRACTICE AREA**Roxbury, Connecticut**

Aerobic practice area will be conducted between the altitudes of 2500 ft and 4500 ft MSL and performed within an approximate 2 mile radius of a point defined from the CARMEL VOR (CMK) as the 052 degree radial/21.9 GPS-DME fix. It is 8 NM NW of the Oxford, CT airport (OXC).

SEARCH LIGHT DEMONSTRATION**Baltimore, Maryland**

Downtown, at the Inner Harbor

Each evening, seven days per week

A vertical search light beam demonstration will be conducted at the Pier V Hotel, at Baltimore Inner Harbor, Baltimore, Maryland, BAL 028/7. Lat N39°17'24", Long W76°36'27". Search light beams are being radiated from the SFC upward. Flashblindness or cockpit illumination may occur at several miles distance. The Leesburg Automated Flight Service Station, 1-703-771-3696 is the FAA coordination facility.

**LASER BASED ATMOSPHERIC RESEARCH
INTERVALE VILLAGE/MOUNT WASHINGTON VALLEY****Bartlett, New Hampshire**

Laser based atmospheric research will be conducted at Intervale Village in the town of Bartlett, New Hampshire. The "Ground Winds" system is a research laser that will be located at Latitude 44°05'56.24" North, Longitude 071°09'31.25" West (NAD83), or BML 195 032. Laser research will be conducted continuously.

The laser light will project at a fixed 45° angle, as measured from the horizon, from the surface to 60,000 feet and beyond. When activated, the light will be at a fixed azimuth. However, the azimuth will periodically change. At 10,000 feet in altitude, the internal cone will only be 10 miles in diameter, but only projecting in one direction (azimuth) at any time. Avoid airborne hazard, this beam may be injurious to Pilots/Aircrews and passengers eyes within 9 nautical miles. The secondary effects of Flash blindness or Cockpit Illumination may occur at great distances. The Boston Air Route Traffic Control Center, (603) 879-6655, is the FAA coordination facility.

Laser Light Activity Canobie Lake Water Park, Salem, New Hampshire

Laser light shows are being conducted at the Canobie Lake Water Park in Salem, NH. Show orientation and laserbeam projections will be directed in all 360° directions. Laser light beams may be injurious to pilot's/passenger's eyes within 3,000 feet laterally of the light source and surface to 1,650 feet AMSL. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. The laser will be stationed at N42°47'32"/W071°14'44" (LWM 310/7.4 DME). Manchester ATCT 1-603-666-7591 will be the coordination facility.

LASER LIGHT DEMONSTRATION Atlantic City, New Jersey

Laser light demonstrations are being conducted at the Atlantic Park, downtown Atlantic City, New Jersey, 0001-0700 UTC, ACY VORTAC 145/8.5. Approximately: 39°21'31"N/74°26'15"W. Laser light beam may be injurious to pilots/passengers eyes within 100 feet above ground, 100 feet AMSL, 900 feet laterally of the light source. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. The Atlantic City ATCT, 609-641-3940, is the coordination facility.

LASER LIGHT DEMONSTRATION Darien Lake Theme Park, Darien Center, New York

Laser light demonstrations are being conducted at the Darien Lake Theme Park, Darien Center, NY. The show orientation and laser beam projection are directed to the southern half of a circle form this site. Buffalo VOR/DME 100R/12NM. (42°56'04"N/78°23'30"W). Laser light beams may be injurious to pilot's/passenger's eyes within 2,800 feet of the light source, 1,600 feet above ground level. The secondary effect of flash blindness or cockpit illumination may occur beyond these distances. The Buffalo ATCT, 716-633-0664 is the FAA coordination facility.

LASER LIGHT DEMONSTRATIONS DORNEY THEME PARK, DORNEYVILLE, PENNSYLVANIA

Laser light demonstrations are being conducted at the Dorney Theme Park, northwest of Dorneyville, PA. Show orientation and laserbeam projections directed to the southern quadrant from FJC 210D/10DME (N40°34'47"/W75°32'06"). Laser light beams may be injurious to pilot's/passenger's eyes within 2000 ft laterally of the light source, 500 ft AGL, 1100 ft AMSL. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. Allentown ATCT, 1-610-264-4539 is the FAA coordination facility.

MODEL AIRCRAFT ACTIVITY, HARFORD COUNTY MARYLAND

Radio controlled model aircraft operating to 800 feet AGL vicinity of N39°37'30" W76°18'35" in Harford County, Maryland.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS GENERAL EDWARD LAWRENCE LOGAN INTERNATIONAL AIRPORT (BOS) BOSTON, MASSACHUSETTS

Boston Logan International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver will allow the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 04R at Taxiway Charlie

Runway 22L at Taxiway Charlie

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
NEWARK LIBERTY INTERNATIONAL AIRPORT (EWR)
NEWARK, NEW JERSEY**

Newark International Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 22R at Taxiway Whiskey

Runway 22L at Taxiway Whiskey

Runway 29 at Taxiway Romeo

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
JOHN F KENNEDY INTERNATIONAL AIRPORT (JFK)
NEW YORK, NEW YORK**

Kennedy Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 13R at Taxiway Papa Delta

Runway 22R at Taxiway Charlie

Runway 31L at Taxiway Kilo Kilo

Runway 31R at Taxiway Zulu Alpha

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
PITTSBURGH INTERNATIONAL AIRPORT (PIT)
PITTSBURGH, PENNSYLVANIA**

Pittsburgh Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during periods of darkness, at the intersections listed below.

Runway 28L at Taxiway Papa

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

**INTERSECTING RUNWAY OPERATIONS
NEWARK LIBERTY INTERNATIONAL AIRPORT (EWR)
NEWARK, NEW JERSEY**

Newark Liberty International (EWR) Airport Traffic Control Tower (ATCT) has been authorized to conduct intersecting runway operations to Runway 29 and Runway 04R whereby an aircraft arriving Runway 29 shall be through the intersection of Runway 04R prior to the arriving aircraft on Runway 04R reaching a point no closer than 5,000 feet from the intersection of both runways.

**INTERSECTING RUNWAY OPERATIONS
PHILADELPHIA INTERNATIONAL AIRPORT (PHL)
PHILADELPHIA, PENNSYLVANIA**

Philadelphia International Airport Control Tower has been granted a waiver that authorizes air traffic personnel to conduct simultaneous ILS approaches to Runway 26 while aircraft simultaneously depart Runway 27R.

**LAND AND HOLD SHORT LIGHTS (for LAHSO)
BOSTON-LOGAN AIRPORT, MASSACHUSETTS**

Land and Hold Short lights have been installed on four runways at Boston-Logan Airport (BOS). These in-pavement lighting systems will remain on/flashing whenever LAHSO is expected to be conducted to that particular runway. Flight crews should also expect to see these lights on/flashing even when authorized the full length of the runway for landing, or when utilizing that runway for departure.

Land and Hold Short lights have been installed at the following locations:

Runway 22L (Short of Runway 27/09)

Runway 4L (Short of Runway 33R/15L)

Runway 27 (Short of Runway 22L/04R)

Runway 15R (Short of Runway 09/27)

CHARLESTON, WEST VIRGINIA

Mine blasting approximately 25 NM south and southeast of Charleston, West Virginia as follows:

Mine Blasting HVQ VORTAC 110° 25 DME to 400' AGL

Mine Blasting HVQ VORTAC 189° 26 DME to 300' AGL

CAUTION—FISH SPOTTING ACTIVITY—CHESAPEAKE BAY AND COASTAL WATERS

Caution is advised for extensive fish spotter aircraft activity between May 1 and December 1 upwards from 1500 feet above the surface over the Chesapeake Bay and adjacent coastal waters. Pilots should be alert for this activity. For further information contact FAA/Norfolk ATCT on 1-757-460-5142.

BOSTON, MASSACHUSETTS

To avoid the concentration of aircraft arriving and departing Boston, pilots requesting IFR flight at and below altitudes 14,000 feet MSL should file for airways beyond 40 NM from Boston VORTAC between the hours of 0800-2100 local. Traffic to/from Maine and Cape may file V167.

BOURNE, MASSACHUSETTS

Aircraft operation below 2000 ft and within 3 miles of Pave Paws radar site located in Restricted Area 4101 may experience momentary erratic operation of cockpit instruments or navigational equipment. Pilots are encouraged to submit reports of such occurrences to nearest FAA Air Traffic Facility.

**SPECIAL NORTH ATLANTIC, CARIBBEAN AND
PACIFIC AREA COMMUNICATIONS**

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area:	123.45 MHz
Caribbean area:	123.45 MHz
Pacific area:	123.45 MHz

MILITARY TRAINING ROUTES

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

CIVIL USE OF MILITARY FIELDS:

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission. Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

AIRCRAFT LANDING RESTRICTIONS

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

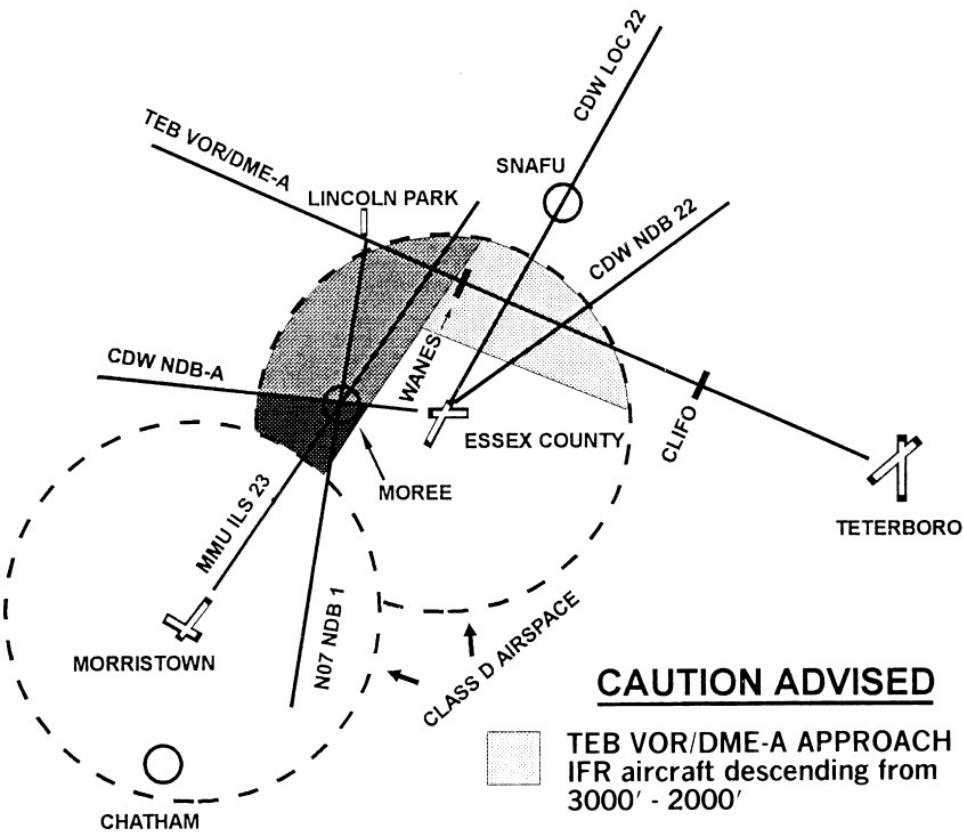
1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ)	08	Milwaukee, WI (MKE).....	01L
Anchorage, AK (ANC)	07R	Minneapolis, MN (MSP)	30L
Andrews AFB, MD (ADW)	01L	Nashville, TN (BNA)	02L
Atlanta, GA (ATL).....	09R	New Orleans, LA (MSY)	10
Baltimore, MD (BWI).....	10	New York, NY (JFK)	04R
Bismarck, ND (BIS)	31	New York, NY (LGA)	22
Boise, ID (BOI).....	10R	Newark, NJ (EWR).....	04R
Boston, MA (BOS)	04R	Oklahoma City, OK (OKC)	35R
Charlotte, NC (CLT)	36L	Omaha, NE (OMA)	14R
Chicago, IL (ORD).....	10	Ontario, CA (ONT).....	26L
Cincinnati, OH (CVG)	36C	Philadelphia, PA (PHL)	09R
Cleveland, OH (CLE)	06R	Phoenix, AZ (PHX).....	08
Dallas/Fort Worth, TX (DFW)	17C	Pittsburgh, PA (PIT)	10L
Denver, CO (DEN).....	35R	Reno, NV (RNO)	16R
Des Moines, IA (DSM)	31	Salt Lake City, UT (SLC)	34L
Detroit, MI (DTW)	03R	San Antonio, TX (SAT)	12R
El Paso, TX (ELP)	22	San Diego, CA (SAN).....	09
Fairbanks, AK (FAI)	01L	San Francisco, CA (SFO)	28R
Great Falls, MT (GTF)	03	San Juan, PR (SJU)	08
Honolulu, HI (HNL)	08L	Seattle, WA (SEA)	16C
Houston, TX (IAH).....	26L	St. Louis, MO (STL)	30R
Indianapolis, IN (IND)	05L	Tampa, FL (TPA)	36L
Jacksonville, FL (JAX).....	07	Tulsa, OK (TUL).....	36R
Kansas City, MO (MCI).....	19R	Washington, DC (DCA)	01
Los Angeles, CA (LAX).....	24R	Washington, DC (IAD)	01R
Memphis, TN (MEM)	36L	Wichita, KS (ICT)	01L
Miami, FL (MIA).....	08R		

NOTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

CALDWELL - TETERBORO - MORRISTOWN

INSTRUMENT APPROACH - AIRSPACE INTERACTION CHART**CAUTION ADVISED**

TEB VOR/DME-A APPROACH
IFR aircraft descending from
3000' - 2000'



MMU ILS/NDB RWY 23 APPROACH
IFR aircraft descending from 3000'
to cross MOREE at 2000'



MMU ILS/NDB RWY 23 APPROACH
IFR aircraft descending from 2000'
to surface

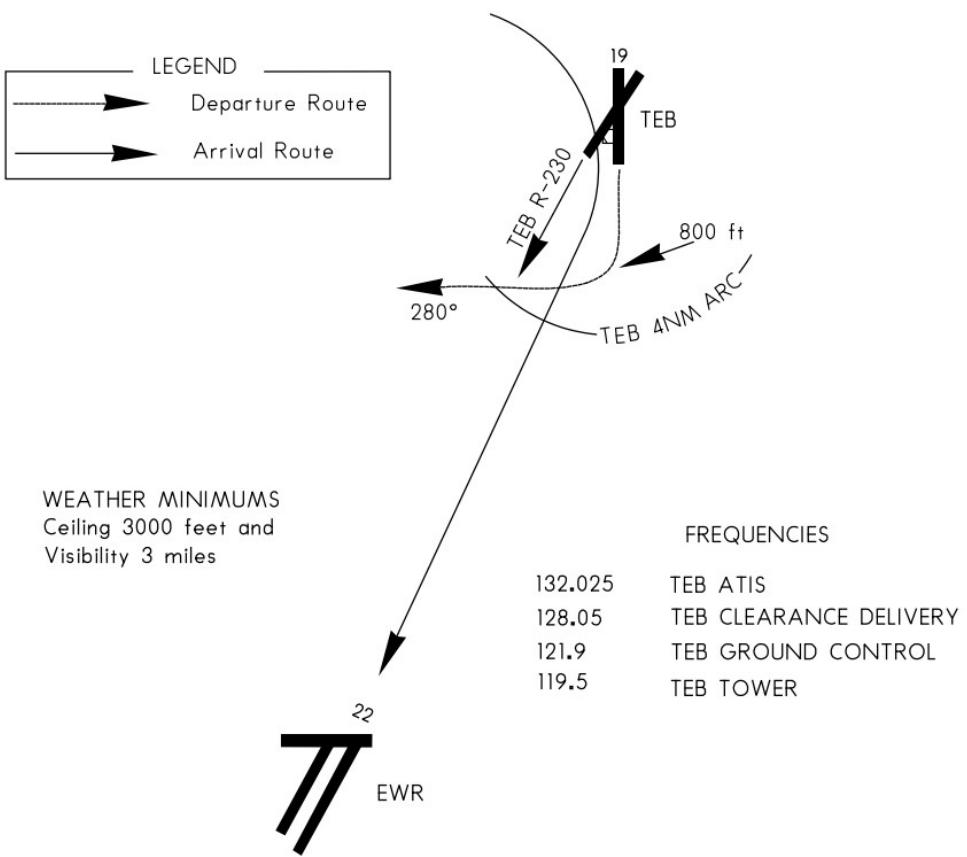
TERMINAL AREA GRAPHIC NOTICE

(Not to be used for Navigation)

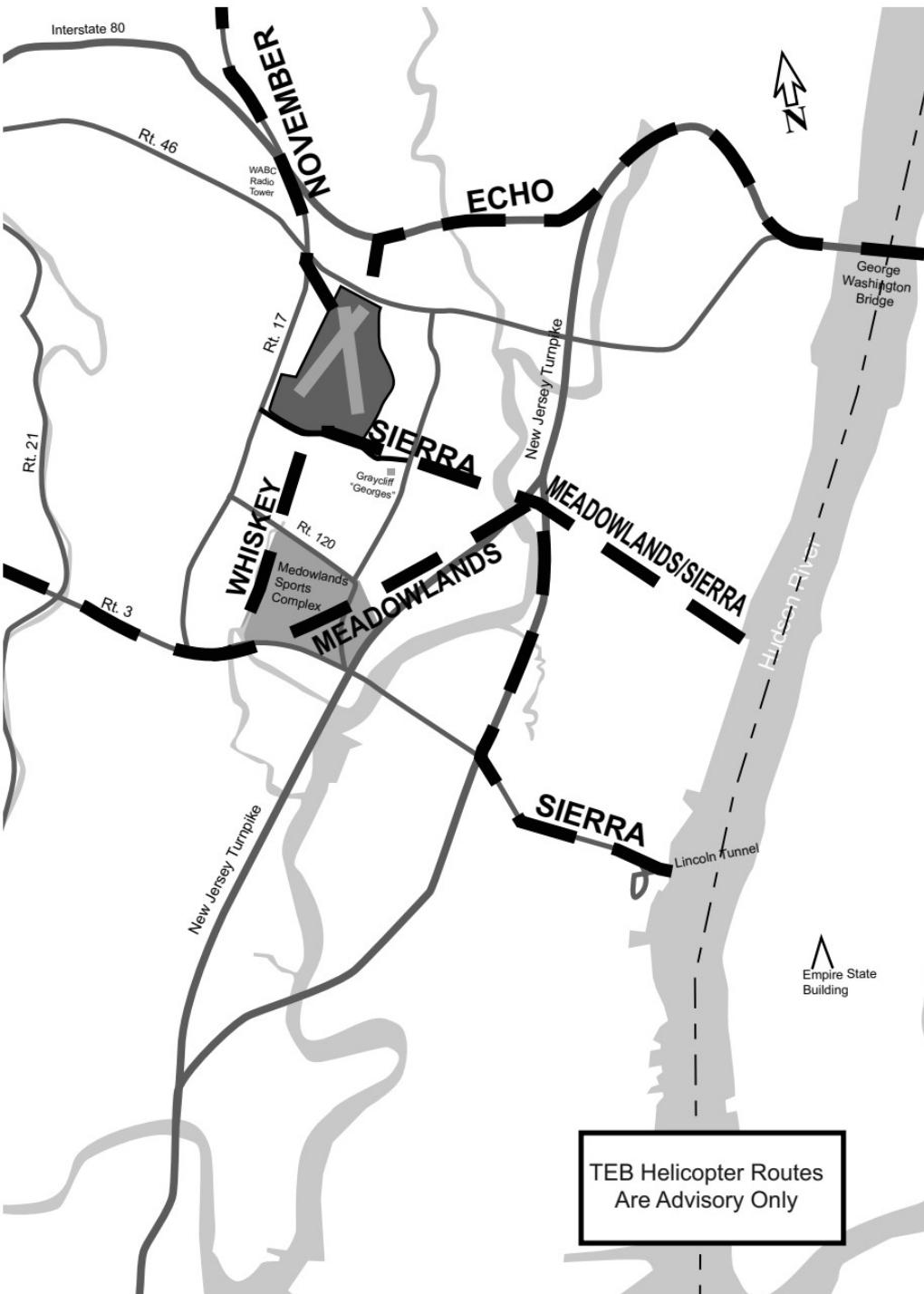
Teterboro (TEB) Airport Runway 19 VFR Departure Procedure with Transition to an IFR Clearance when Newark is landing Runway 22 and Teterboro is departing Rwy 19.

"DALTON DEPARTURE PROCEDURE"

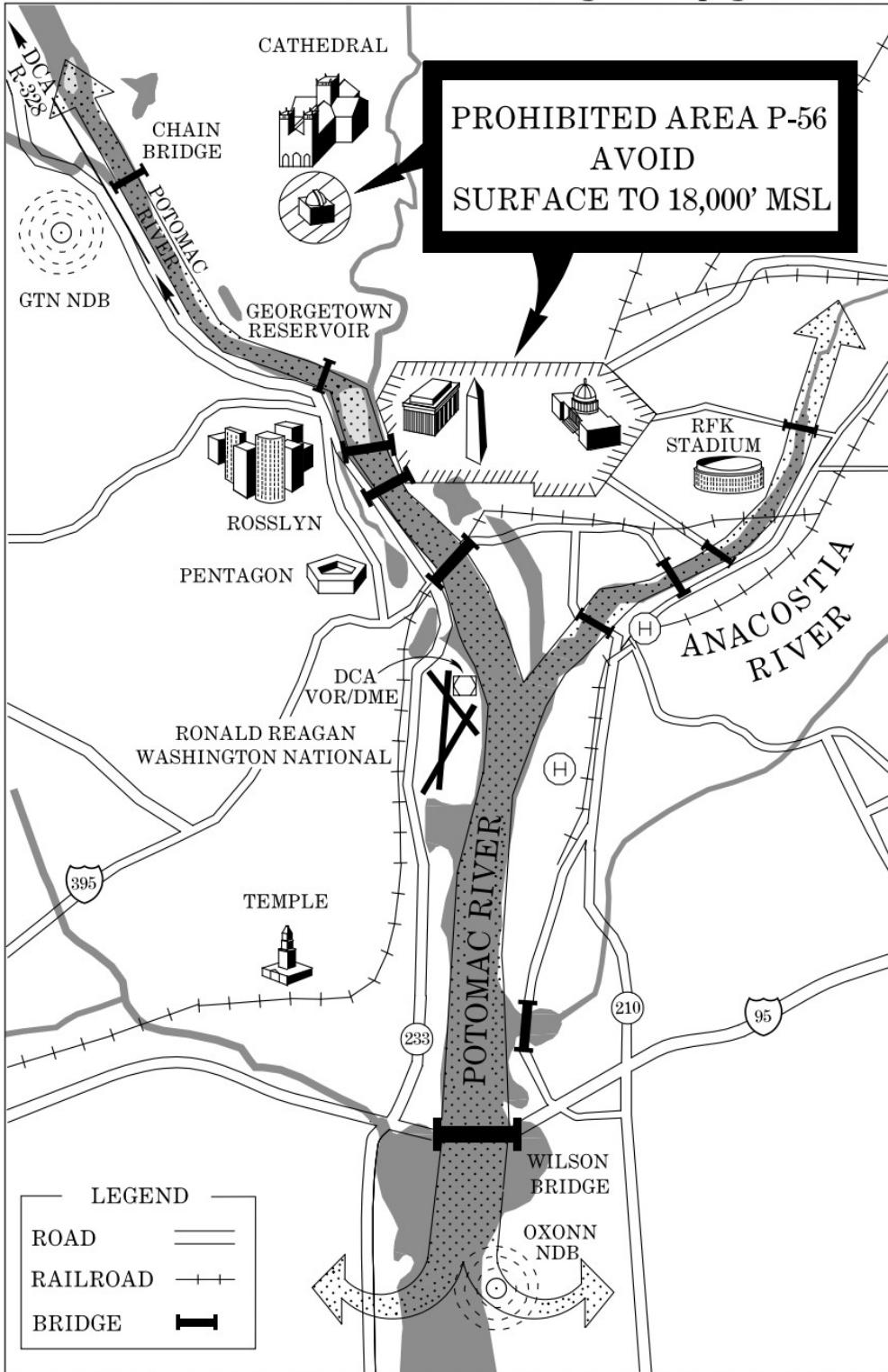
PILOTS SHOULD SPECIFICALLY REQUEST THIS PROCEDURE USING THE ABOVE NAME.



SPECIAL NOTICES
TERTBORO HELICOPTER ROUTES



RONALD REAGAN WASHINGTON NATIONAL AIRPORT
NOISE ABATEMENT & PROHIBITED AREA (P-56)
AVOIDANCE PROCEDURES (Page 1 of 2 pages)



SPECIAL NOTICES**RONALD REAGAN WASHINGTON NATIONAL AIRPORT
NOISE ABATEMENT & PROHIBITED AREA (P-56) AVOIDANCE PROCEDURES
(Page 2 of 2 pages)**

**P-56 BEGINS APPROXIMATELY 1.5 NM NORTH OF THE DEPARTURE END OF RUNWAY
01-SURFACE TO 18,000' MSL
REMAIN CLEAR OF P-56 AT ALL TIMES**

**EXPECT THE PUBLISHED RNAV DEPARTURE PROCEDURE OR ATC INSTRUCTIONS FOR
THE FOLLOWING NON-RNAV PROCEDURES**

NORTHWEST: Follow the Potomac River until abeam the Georgetown reservoir or the DCA 4 DME, then join the DCA 328 radial, expect radar vectors at 10 DME. A left turn as soon as practicable, especially with a west wind, is required to maintain a ground track over the Potomac River and remain clear of P-56. If unable to maintain visual reference to the Potomac River, join the DCA 328 radial.

NORTHEAST: Follow the Anacostia River to 5 DME. A right turn as soon as practicable, especially with a east wind, is required to maintain a ground track over the Anacostia River and remain clear of P-56. Expect Radar Vectors at 5 DME. If unable to maintain visual reference to the Anacostia River, then join the DCA 070 radial.

SOUTH: Follow the Potomac River to 5 DME, then expect radar vectors. If unable to maintain visual reference to the Potomac river, then join the DCA 185 radial.

ARRIVAL PROCEDURES

LANDING NORTH: Weather conditions 3000/4 or better, expect the Mount Vernon visual approach. Lower weather conditions, expect the advertised instrument approach.

LANDING SOUTH: Weather conditions 3500/3 or better, expect the River Visual Approach. Lower weather conditions, expect the advertised instrument approach.

NIGHTTIME NOISE LEVELS

From 2200 to 0700 local time, operation of aircraft type and model which exceed the following noise levels violate Metropolitan Washington Airport Authority Regulation (MWAR) 3.11:

DEPARTURES – 72 dBA as generated on takeoff.

ARRIVALS – 85 dBA as generated on approach, except that aircraft scheduled to arrive before 2200 will be permitted to land if they have received an approach clearance before 2230. Ref. MWAR 3.11 and Advisory Circular 36-3.

NIAGARA FALLS FLIGHT RESTRICTION AREA**Part 93—Special Air Traffic Rules; Subpart E—Flight Restrictions in the Vicinity of Niagara Falls, New York****§ 93.71 General operating procedures**

(a) Flight restrictions are in effect below 3,500 feet MSL in the airspace above Niagara Falls, New York, west of a line from latitude 43°06'33"N., longitude 78°03'30"W. (the Whirlpool Rapids Bridge) to latitude 43°04'47"N., longitude 79°02'44"W. (the Niagara River Inlet) to latitude 43°04'29"N., longitude 79°03'30"W. (the International Control Dam) to the United States/Canadian Border and thence along the border to the point of origin.

(b) No flight is authorized below 3,500 feet MSL in the area described in paragraph (a) of this section, except for aircraft operations conducted directly to or from an airport/heliport within the area, aircraft operating on an ATC-approved IFR flight plan, aircraft operating the Scenic Falls Route pursuant to approval of Transport Canada, aircraft carrying law enforcement officials, or aircraft carrying properly accredited news representatives for which a flight plan has been filed with Buffalo NY (BUF) Automated Flight Service Station (AFSS).

(c) Check with Transport Canada for flight restrictions in Canadian airspace. Commercial air tour operations approved by Transport Canada will be conducting a north/south orbit of the Niagara Falls area below 3,500 feet MSL over the Niagara River.

(d) The minimum altitude for VFR flight over the Scenic Falls area is 3,500 feet MSL.

(e) Comply with the following procedures when conducting flight over the area described in paragraph (a) of this section:

(1) Fly a clockwise pattern;

(2) Do not proceed north of the Rainbow Bridge;

(3) Prior to joining the pattern, broadcast flight intentions on frequency 122.05 Mhz, giving altitude and position, and monitor the frequency while in the pattern;

(4) Use the Niagara Falls airport altimeter setting. Contact Niagara Falls Airport Traffic Control Tower to obtain the current altimeter setting, to facilitate the exchange of traffic advisories/restrictions, and to reduce the risk of midair collisions between aircraft operating in the vicinity of the Falls. If the Control Tower is closed, use the appropriate Automatic Terminal Information Service (ATIS) Frequency;

(5) Do not exceed 130 knots;

(6) Anticipate heavy congestion of VFR traffic at or above 3,500 feet MSL; and

(7) Use caution to avoid high-speed civil and military aircraft transiting the area to or from Niagara Falls Airport.

(f) These procedures do not relieve pilots from the requirements of Sec. 91.113 of this chapter to see and avoid other aircraft.

(g) Flight following, to and from the area, is available through Buffalo Approach.

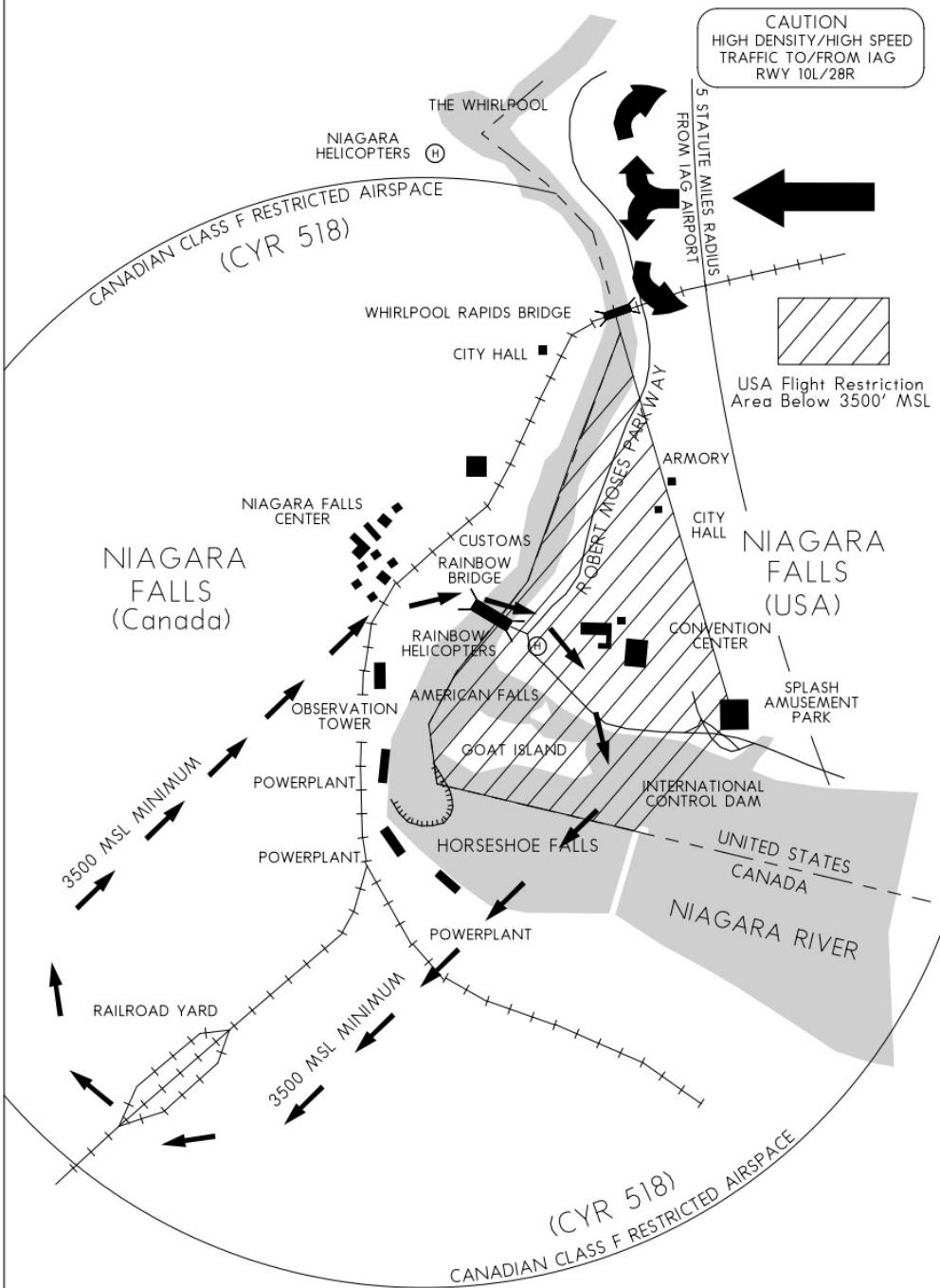
ADVISORY: AMUSEMENT ATTRACTION-NIAGARA FALLS, NY

An amusement attraction similar to a moored balloon will be conducted daily, 0700–2400 LCL, April 1 through October 31, 5 miles SW of the Niagara Falls Intl Airport (IAG), approx. BUF305/021, on the American side of Rainbow Bridge, Niagara Falls, NY, at altitudes up to 1050' MSL/500' AGL. For further information contact Buffalo AFSS on 1-716-631-3756.

CONTINUED ON NEXT PAGE

SPECIAL NOTICES
CONTINUED FROM PRECEDING PAGE

FLIGHT RESTRICTIONS IN THE VICINITY OF NIAGARA FALLS, NY



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

White Plains, New York
WESTCHESTER COUNTY AIRPORT NOISE ABATEMENT PROCEDURES

Noise abatement procedures in effect at all times, contact 914-995-4861.

Airport located in noise sensitive area. Noise monitoring and positive aircraft and helicopter event identification in effect at all times.

High Range Noise Event program: Operators that cause noise levels at or above 93 dBA will be contacted.

Voluntary restraint from flying time period is from midnight to 6:30 am local time. Limit use of reverse thrust.

Run-ups: Must receive prior approval from airport operations. No aircraft with certificated maximum gross weight in excess of 120,000 lb land or take off at the airport without prior permission of the Airport Manager.

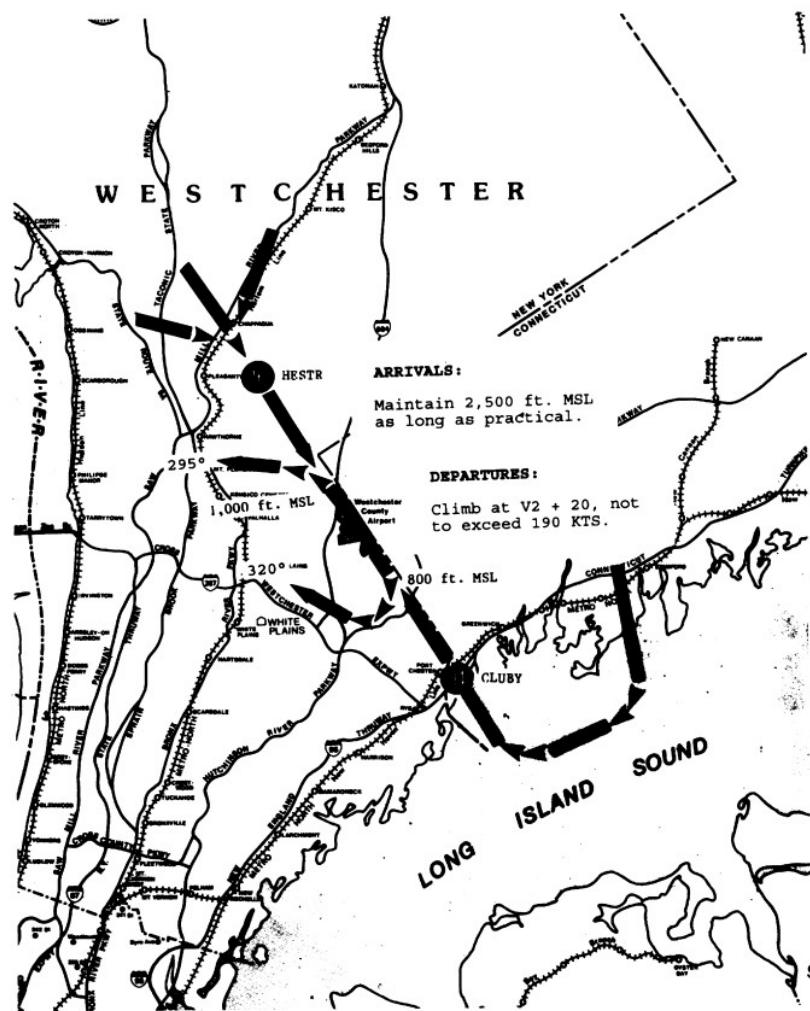
For all aircraft above 12,500 lbs: Use SIDs and STARs for noise abatement, conditions permitting; utilize Sound Visual Approaches.

All aircraft must follow ATC instructions, departure procedures, or AC001, F2A (distress/noise, statement, departure procedures).

All runways: Utilize NBAA "standard" departure procedures, or ACS
Light aircraft: Runway 24 departures north and eastbound, fly over

Light aircraft: Runway 34 departures north and eastbound, fly over Interstate until reaching 1,500 feet MSL, Touch-and-go's: Runway 29 recommended traffic pattern in effect.

Touch-and-go's: Runway 29 recommended traffic pattern
Helicopters: Use New York Helicopter Route Chart for



TERMINAL AREA GRAPHIC NOTICE

(NOT TO BE USED FOR NAVIGATION)

Nantucket, Massachusetts

Nantucket Memorial Airport VFR Noise Abatement Procedures

Noise abatement procedures in effect at all times, contact (508) 325-7531. Additional detailed noise abatement procedures via internet at www.NantucketAirport.com/noise.htm.

ARRIVALS**CONTACT NANTUCKET TOWER (118.3) 15 MILES OUT FOR LANDING INSTRUCTIONS**

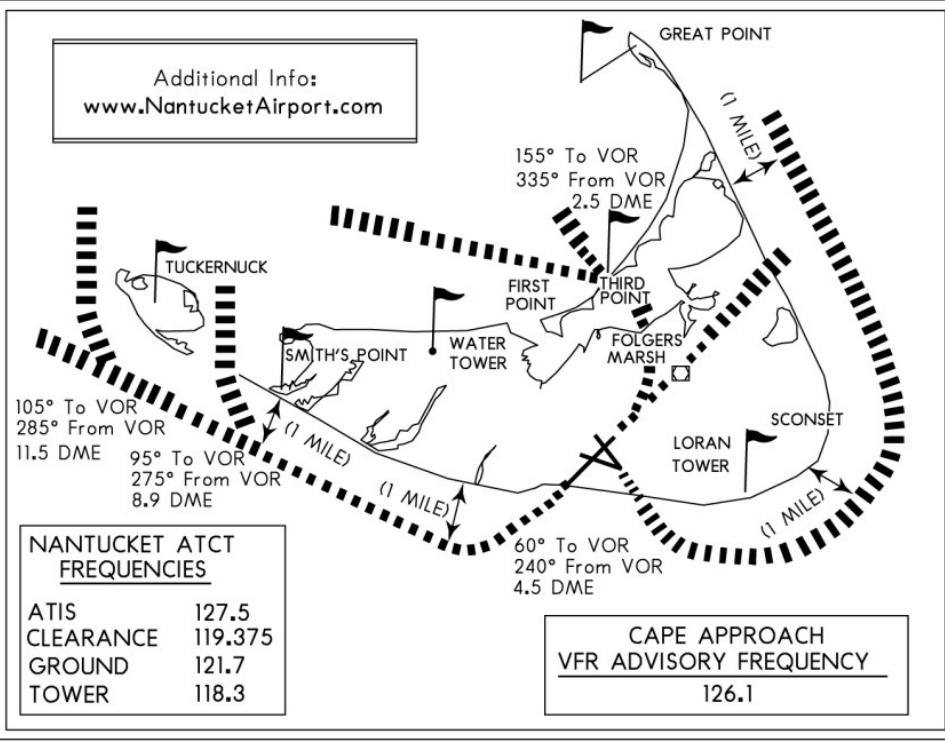
SINGLE ENGINES - (Pattern speed 130 knots or less) Plan to overfly island high (2000'+ AGL). Expect L/R base landing Runway 30 or Runway 33 when x-winds are under 12 knots. Descend offshore for landing whenever possible.

TWINS - Remain over water and expect to land on Runway 24 (wind permitting). Contact Tower for landing sequence abeam Great Point. Cross Third Point at 1000' AGL. Follow Folgers Marsh (right base) for landing on Runway 24.

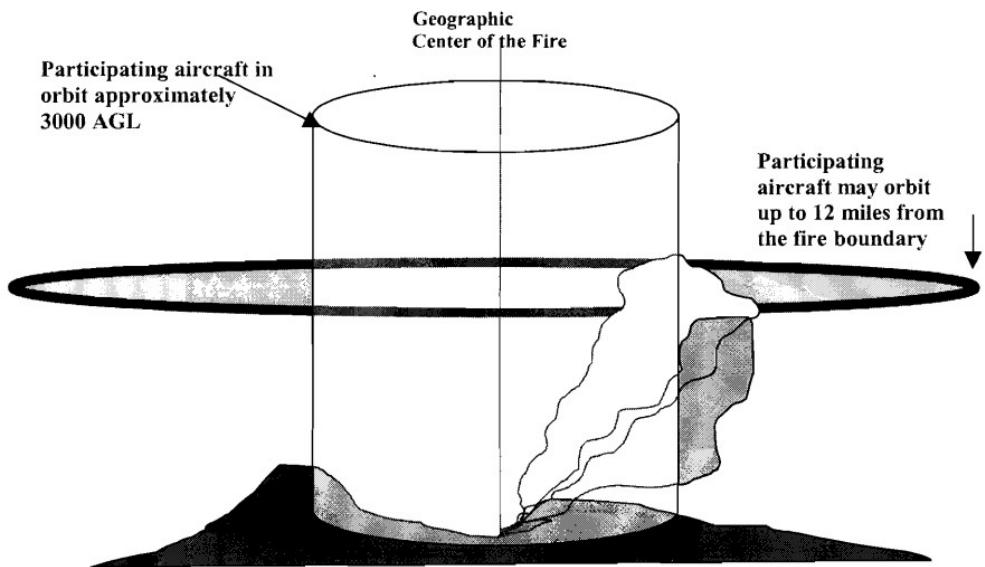
TURBOPROPS/JETS - Remain over water and expect straight in approach to Runway 24 (wind permitting). Enter final approach offshore outside Outer Marker.

DEPARTURES

Make maximum use of over water departure routes, maintaining 1 mile offshore and avoid island crossings whenever possible.

GENERAL AVIATION/AIRLINE CORRIDORS

FIREFIGHTING TRAFFIC AREAS



Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

REGULATORY NOTICES

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93-1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at <http://www.faa.gov>. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll-free telephone number for accessing e-CVRS is 1-800-875-9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll-free areas may access e-CVRS by calling the toll number of 703-707-0568. The Internet web address for accessing the e-CVRS is <http://www.fly.faa.gov/ecvrs>. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904-4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904-4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e-CVRS.

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FSS TELEPHONE NUMBERS

Flight Service Station (FSS) facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large FSS facilities and a few select remote facilities some of which operate part-time. Because of the interconnectivity between the facilities, all FSS services including radio frequencies are available continuously using published data.

Telephone Information Briefing Service (TIBS) is a FSS service that provides continuous recordings of meteorological and/or aeronautical information. A touch-tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

NATIONAL FSS TELEPHONE NUMBER

Pilot Weather Briefings 1-800-WX-BRIEF (1-800-992-7433)

OTHER FSS TELEPHONE NUMBERS (except in Alaska)

TIBS (see description above) 1-877-4TIBS-WX (1-877-484-2799)

Clearance Delivery Only 1-888-766-8267

Lifeguard Flights Only 1-877-LIF-GRD3 (1-877-543-4733)

Flights within DC SFRA & FRZ * 1-866-225-7410

* District of Columbia Special Flight Rules Area & Flight Restricted Zone

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

TAF KPIT 091730Z 091818 15005KT 5SM HZ FEW020 WS010/31022KT
 FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA
 OVC008CB
 FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR
 FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

METAR KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB
 18/16 A2992 RMK SLP045 T01820159

Forecast	Explanation	Report
TAF	Message type: <u>TAF</u> -routine or <u>TAF AMD</u> -amended forecast, <u>METAR</u> -hourly, <u>SPECI</u> -special or <u>TESTM</u> -non-commissioned ASOS report	METAR
KPIT	ICAO location indicator	KPIT
091730Z	Issuance time: ALL times in UTC " <u>Z</u> ", 2-digit date, 4-digit time	091955Z
091818	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	COR
15005KT	In U.S. METAR : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on	22015G25KT
5SM	Wind: 3 digit true-north direction, nearest 10 degrees (or <u>VaRiaBle</u>); next 2-3 digits for speed and unit, <u>KT</u> (KMH or MPS); as needed, <u>Gust</u> and maximum speed; 00000KT for calm; for METAR , if direction varies 60 degrees or more, <u>Variability</u> appended, e.g. 180 <u>V260</u>	3/4SM
HZ	Prevailing visibility: in U.S., <u>Statute Miles</u> & fractions; above 6 miles in TAF <u>Plus6SM</u> . (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	R28L/2600FT
FEW020	Runway Visual Range: <u>R</u> ; 2-digit runway designator <u>Left</u> , <u>Center</u> , or <u>Right</u> as needed; <u>/</u> ; <u>Minus</u> or <u>Plus</u> in U.S., 4-digit value, <u>FeeT</u> in U.S., (usually meters elsewhere); 4-digit value <u>Variability</u> 4-digit value (and tendency <u>Down</u> , <u>Up</u> or <u>No change</u>)	TSRA
	Significant present, forecast and recent weather: see table (on back)	OVC010CB
	Cloud amount, height and type: <u>SKy</u> <u>Clear</u> 0/8, <u>FEW</u> >0/8-2/8, <u>SCaTtered</u> 3/8-4/8, <u>BroKeN</u> 5/8-7/8, <u>OverCast</u> 8/8; 3-digit height in hundreds of ft; <u>Towering</u> <u>CUmulus</u> or <u>CumulonimBus</u> in METAR ; in TAF , only <u>CB</u> . <u>Vertical Visibility</u> for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated METAR reports only, <u>CLeaR</u> for "clear below 12,000 feet"	18/16
	Temperature: degrees Celsius; first 2 digits, temperature <u>/</u> last 2 digits, dew-point temperature; <u>Minus</u> for below zero, e.g., M06	A2992
	Altimeter setting: indicator and 4 digits; in U.S., <u>A</u> -inches and hundredths; (<u>Q</u> -hectoPascals, e.g., Q1013)	

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

Forecast	Explanation	Report
WS010/31022KT	In U.S. TAF , non-convective low-level ($\leq 2,000$ ft) <u>Wind Shear</u> ; 3-digit height (hundreds of ft); <u>/</u> ; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u>	
FM1930	In METAR , <u>ReMarK</u> indicator & remarks. For example: <u>Sea_Level Pressure</u> in hectoPascals & tenths, as shown: 1004.5 hPa; <u>Temp/dew-point</u> in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C	RMK SLP045 T01820159
TEMPO 2022	<u>FroM</u> and 2-digit hour and 2-digit minute beginning time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
PROB40 0407	<u>TEMPO</u> ry: changes expected for < 1 hour and in total, < half of 2-digit hour beginning and 2-digit hour ending time period	
BECMG 1315	<u>PROB</u> ability and 2-digit percent (30 or 40): probable condition during 2-digit hour beginning and 2-digit hour ending time period	
	<u>BECoMinG</u> : change expected during 2-digit hour beginning and 2-digit hour ending time period	

Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.

QUALIFIER

Intensity or Proximity

- Light "no sign" Moderate + Heavy

VC Vicinity: but not at aerodrome; in U.S. **METAR**, between 5 and 10SM of the point(s) of observation; in U.S. **TAF**, 5 to 10SM from center of runway complex (elsewhere within 8000m)

Descriptor

MI Shallow	BC Patches	PR Partial	TS Thunderstorm
BL Blowing	SH Showers	DR Drifting	FZ Freezing

WEATHER PHENOMENA

Precipitation

DZ Drizzle	RA Rain	SN Snow	SG Snow grains
IC Ice crystals	PL Ice pellets	GR Hail	GS Small hail/snow pellets
UP Unknown precipitation in automated observations			

Obscuration

BR Mist ($\geq 5/8$ SM)	FG Fog ($< 5/8$ SM)	FU Smoke	VA Volcanic ash
SA Sand	HZ Haze	PY Spray	DU Widespread dust

Other

SQ Squall	SS Sandstorm	DS Duststorm	PO Well developed
FC Funnel cloud	+FC tornado/waterspout		dust/sand whirls

- Explanations in parentheses "()" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- NWS **TAFs** exclude turbulence, icing & temperature forecasts; NWS **METARs** exclude trend fcsts
- Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility ≥ 10 km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

UNITED STATES DEPARTMENT OF COMMERCE

NOAA/PA 96052

National Oceanic and Atmospheric Administration—National Weather Service

**FAA AND NWS
KEY AIR TRAFFIC FACILITIES**

Air Traffic Control System Command Center

Main Number 703-904-4400

RGNL AIR TRAFFIC DIVISIONS

REGION	TELEPHONE
Alaskan	907-271-5464
Central	816-329-2500
Eastern	718-553-4502
Great Lakes	847-294-7202
New England	781-238-7500
Northwest Mountain	425-227-2500
Southern	404-305-5500
Southwest	817-222-5500
Western Pacific	310-725-6500

AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
	#		
Albuquerque	817-222-5006	7:30 a.m.-4:00 p.m.	505-856-4300
Anchorage	907-271-5936	7:30 a.m.-4:00 p.m.	907-269-1137
Atlanta	404-305-5180	7:30 a.m.-5:00 p.m.	770-210-7601
Boston	617-238-7001	7:30 a.m.-4:00 p.m.	603-879-6633
Chicago	847-294-8400	8:00 a.m.-4:00 p.m.	630-906-8221
Cleveland	847-294-8400	8:00 a.m.-4:00 p.m.	440-774-0310
Denver	425-227-1389	7:30 a.m.-4:00 p.m.	303-651-4100
Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	817-858-7300
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-5300
Indianapolis	847-294-8400	8:00 a.m.-4:00 p.m.	317-247-2231
Jacksonville	404-305-5180	8:00 a.m.-4:30 p.m.	904-549-1501
Kansas City	816-329-3000	7:30 a.m.-4:00 p.m.	913-254-8500
Los Angeles	661-265-8200	7:30 a.m.-4:00 p.m.	661-265-8200
Memphis	404-305-5180	7:30 a.m.-4:00 p.m.	901-368-8103
Miami	404-305-5180	7:00 a.m.-3:30 p.m.	305-716-1500
Minneapolis	847-294-8400	8:00 a.m.-4:00 p.m.	651-463-5580
New York	718-995-5426	8:00 a.m.-4:40 p.m.	516-468-1001
Oakland	310-725-3300	6:30 a.m.-3:00 p.m.	510-745-3331
Salt Lake City	425-227-1389	7:30 a.m.-4:00 p.m.	801-320-2500
Seattle	425-227-1389	7:30 a.m.-4:00 p.m.	253-351-3500
Washington	718-995-5426	8:00 a.m.-4:30 p.m.	703-771-3401

MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONs)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
	#		
Atlanta	404-305-5180	7:00 a.m.-3:30 p.m.	404-669-1200
Chicago	847-294-8400	8:00 a.m.-4:00 p.m.	847-608-5509
Dallas/Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	972-615-2500
Denver	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1500
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-8400
New York	718-995-5426	8:00 a.m.-4:30 p.m.	516-683-2901
Northern CA	310-725-3300	7:00 a.m.-3:30 p.m.	916-366-4001
Potomac	718-995-5426	8:00 a.m.-4:30 p.m.	540-349-7500
Southern CA	310-725-3300	7:30 a.m.-4:00 p.m.	858-537-5800

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

KEY AIR TRAFFIC FACILITIES

DAILY NAS REPORTABLE AIRPORTS

AIRPORT NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque Intl Sunport, NM	817-222-5006	8:00 a.m.-5:00 p.m.	505-842-4366
Andrews AFB, MD	718-995-5426	8:00 a.m.-4:30 p.m.	301-735-2380
Baltimore/Washington			
Intl Thurgood Marshall, MD	718-995-5426	8:00 a.m.-4:30 p.m.	410-962-3555
Boston Logan Intl, MA	781-238-7001	7:30 a.m.-4:00 p.m.	617-455-3100
Bradley Intl, CT	617-238-7001	7:30 a.m.-4:00 p.m.	203-627-3428
Burbank/Bob Hope, CA	310-725-3300	7:00 a.m.-5:30 p.m.	818-567-4806
Charlotte Douglas Intl, NC	404-305-5180	8:00 a.m.-4:30 p.m.	704-344-6487
Chicago Midway, IL	847-294-8400	8:00 a.m.-4:00 p.m.	773-884-3670
Chicago O'Hare Intl, IL	847-294-8400	8:00 a.m.-4:00 p.m.	773-601-7600
Cleveland Hopkins Intl, OH	847-294-8400	8:00 a.m.-4:00 p.m.	216-898-2020
Covington/Cincinnati, OH	708-294-7401	8:00 a.m.-4:30 p.m.	606-767-1006
Dallas/Ft. Worth Intl, TX	817-222-5006	8:30 a.m.-5:00 p.m.	972-615-2531
Dayton Cox Intl, OH	847-294-8400	7:30 a.m.-4:00 p.m.	937-454-7300
Denver Intl, CO	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1600
Detroit Metro, MI	847-294-8400	8:00 a.m.-4:00 p.m.	734-955-5000
Fairbanks Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-474-0050
Fort Lauderdale Intl, FL	404-305-5180	7:00 a.m.-3:30 p.m.	305-356-7932
George Bush			
Intercontinental/Houston, TX	817-222-5006	7:30 a.m.-4:00 p.m.	713-230-8400
Hartsfield-Jackson Atlanta Intl, GA	404-305-5180	7:00 a.m.-3:30 p.m.	404-669-1200
Honolulu Intl, HI	310-725-3300	7:30 a.m.-4:00 p.m.	808-840-6100
Houston Hobby, TX	817-222-5006	8:00 a.m.-5:00 p.m.	713-847-1400
Indianapolis Intl, IN	847-294-8400	8:00 a.m.-4:00 p.m.	317-484-6600
Kahului/Maui, HI	310-725-3300	7:30 a.m.-4:00 p.m.	808-877-0725
Kansas City Intl, MO	816-329-3000	7:30 a.m.-4:00 p.m.	816-329-2700
Las Vegas McCarran, NV	310-725-3300	7:30 a.m.-4:00 p.m.	702-262-5978
Los Angeles Intl, CA	310-725-3300	7:00 a.m.-3:30 p.m.	310-342-4900
Louis Armstrong New Orleans Intl, LA	817-222-5006	7:00 a.m.-4:30 p.m.	504-471-4300
Memphis Intl, TN	404-305-5180	7:30 a.m.-4:00 p.m.	901-322-3350
Miami Intl, FL	404-305-5180	7:00 a.m.-4:00 p.m.	305-869-5400
Minneapolis/St. Paul, MN	847-294-8400	8:00 a.m.-4:00 p.m.	612-713-4000
Nashville Intl, TN	404-305-5180	7:00 a.m.-3:30 p.m.	615-781-5460
New York Kennedy Intl, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-656-0335
New York La Guardia, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-335-5461
Newark Liberty Intl, NJ	718-995-5426	7:30 a.m.-4:00 p.m.	973-565-5000
Norman Y. Mineta San Jose Intl, CA	310-725-3300	7:30 a.m.-4:00 p.m.	408-982-0750
Ontario Intl, CA	310-725-3300	7:30 a.m.-4:00 p.m.	909-983-7518
Orlando Intl, FL	404-305-5180	7:30 a.m.-5:00 p.m.	407-850-7000
Philadelphia Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	215-492-4100
Phoenix Sky Harbor Intl, AZ	310-725-3300	7:30 a.m.-4:00 p.m.	602-379-4226
Pittsburgh Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	412-269-9237
Portland Intl, OR	425-227-1389	7:30 a.m.-4:00 p.m.	503-493-7500
Raleigh-Durham, NC	404-305-5180	8:00 a.m.-4:30 p.m.	919-840-5544
Ronald Reagan Washington			
National, DC	718-995-5426	8:00 a.m.-4:30 p.m.	703-413-1535
Salt Lake City, UT	425-227-1389	7:30 a.m.-4:00 p.m.	801-325-9600
San Antonio Intl, TX	817-222-5006	8:00 a.m.-4:30 p.m.	210-805-5507
San Diego Lindbergh Intl, CA	310-725-3300	8:00 a.m.-4:30 p.m.	619-299-0677
San Francisco Intl, CA	310-725-3300	7:00 a.m.-3:30 p.m.	650-876-2883
San Juan Intl, PR	404-305-5180	7:30 a.m.-5:00 p.m.	809-253-8663
Seattle-Tacoma Intl, WA	425-227-1389	7:30 a.m.-4:00 p.m.	206-768-2900
St. Louis Lambert, MO	816-329-3000	7:30 a.m.-4:00 p.m.	314-890-1000
Tampa Intl, FL	404-305-5180	7:30 a.m.-4:00 p.m.	813-371-7700
Ted Stevens Anchorage Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-271-2700
Teterboro, NJ	718-995-5426	8:00 a.m.-4:30 p.m.	201-288-1889
Washington Dulles Intl, DC	718-995-5426	8:00 a.m.-4:30 p.m.	571-323-6372
West Palm Beach, FL	404-305-5180	8:00 a.m.-4:30 p.m.	561-683-1867
Westchester Co, NY	718-995-5426	8:00 a.m.-4:30 p.m.	914-948-6520

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

⑧ATLANTA CENTER	H-6-9-10, L-18-22-24-25-26-36, A-1 (KZTL)
Greensboro - 128.8 124.425	
Tri City - 132.9 126.775 120.725	
⑧BOSTON CENTER	H-10-11-12, L-30-31-32-33-34 (KZBW)
Augusta - 134.95	
Barnstable - 132.9 128.75 127.825	
Berlin - 135.7 135.7	
Bucks Harbor - 133.45 133.45	
Burlington - 118.825 120.35 120.35	
Calverton - 124.525	
Caribou - 124.75	
Concord - 128.325	
Cummington - 132.65	
Gardner - 134.7 123.75	
Houlton - 128.05 120.25	
Hyannis - 133.45 133.45	
Islip - 135.8 132.3	
Kingston - 134.3	
Lake George - 135.325 133.625 128.325 121.35	
Lebanon - 134.7	
Melrose - 135.55 133.325 119.25	
Millinocket - 128.05	
Montpelier - 135.7 135.7	
Portland - 128.2	
Rockdale - 133.25 126.475	
St. Albans - 128.05 124.25 120.25	
Shelton - 135.075 134.0 128.1 125.575	
Turin - 135.25 133.25 123.875 120.35	
Utica - 124.125	
Waterboro - 128.2 118.55	
Woodstock - 135.325 133.425 133.425 127.65 124.85 118.425 .	
REMARKS: The provisions of enroute primary radar not available in the BOSTON ARTCC Watertown, NY area at 12,000' and below, Rockdale/Utica, NY areas at 11,000' and below, Delancey, NY area at 7,000' and below, and in the Syracuse/Georgetown, NY areas at all altitudes.	
⑧CLEVELAND CENTER	H-2-5-10-11-12, L-27-28-29-30-31-32, A-2 (KZOB)
Altoona - 132.125 128.45 124.4 121.2	
Bradford - 126.725	
Dubois - 126.725	
Dunkirk - 125.2	
Holland - 135.775 120.625	
Moon Township - 134.475 254.725 133.075	
Morgantown - 126.95	
Warren - 134.125 132.925 119.725	
Waterford - 127.07	
Wayland - 127.475 124.325	
⑧INDIANAPOLIS CENTER - 135.25 132.775 119.95	H-5-9-10-12, L-16-25-26-27-29 (KZID)
Bluefield - 126.575	
Charleston - 134.225 127.4 119.525	
Marmet - 134.225 127.4	

(R)NEW YORK CENTER

Arr-Dep US – 133.7
 Barnegat – **132.15** 132.15
 Barnstable – **135.8** 125.925
 Big Flat – **133.475** 132.2
 Colts Neck – 118.975
 Douglaston – **134.375** 133.05
 Elk Mountain – 134.45 **132.175** 128.5
 Flint Hill – 124.625 134.6 132.1
 Huguenot – 132.6
 Joliet – 133.675 132.5
 Matawan – **125.325** 127.175
 Millville – **134.325**
 Modena – 135.45
 Nantucket – **121.125**
 North Mountain – 133.5 **128.575** 123.625 **121.325**
 Philipsburg – 134.8 **132.875**
 Sayre – 133.35
 Ship Bottom – 128.3 133.05
 Sparta – 133.15
 Williamsport – 124.9

H-10-11-12, L-29-30-32-33-34-36

(KZNY)

(R)WASHINGTON CENTER

H-9-10-12, L-24-25-26-29-34-35-36, A-1

(KZDC)

Arr-Dep US – 135.5 **133.82** 133.12 **128.52** 127.7 **127.42** 124.02 123.85 **118.82**
 Atlantic City – **133.12**
 Bucks Elbow – 135.4 **133.2** 133.2 **121.675**
 Buena Vista – **134.625** 134.4 **133.025** 127.925
 Cape Charles – **128.525**
 Cedar Lake – **124.77** 124.77
 Elkins – 128.6
 Falls Church – **126.875** 135.525 133.97 **132.775**
 Grantsville – 133.65
 Green Bay – **133.725** **132.025** 127.75 118.75
 Hagerstown – **134.15** 134.15
 Linden – 133.55
 Lynchburg – **133.575**
 Manteo – 124.725
 Martinsburg – **132.275**
 Millville – **125.45** 125.45
 Modena – 132.525
 Patuxent River – 133.9
 Roanoke – **134.625**
 Sea Isle – 127.7
 Ship Bottom – 127.025
 Smyrna – 132.05
 South Boston – 124.05
 Whaleyville – 120.75
 White Sulfur Springs – 120.85
 Wilmington – 135.75

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. "T" indicates transmit only and "R" indicates receive only. RCO's available at NAVAIDS are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

ALTOONA AFSS

ALLEGHENY VOR/DME 110.0T 122.1R 122.2 122.4
ALTOONA RCO 122.1R 122.2 122.65 123.6
ALTOONA VOR 108.8T
BRADFORD VOR/DME 116.6T 122.1R 122.2 122.3
CLARION VOR/DME 112.9T 122.1R
DU BOIS RCO 122.2
ELLWOOD CITY VORTAC 115.8T 122.1R
ERIE VORTAC 109.4T 122.1R
FRANKLIN VOR 109.6T 122.1R
INDIAN HEAD VORTAC 108.2T 122.1R
JOHNSTOWN VORTAC 113.0T 122.1R 122.65
KEATING VORTAC 116.0T 122.1R
MONTOUR VORTAC 112.0T 122.1R
PHILIPSBURG VORTAC 115.5T 122.1R **122.5** 122.6
REVLOC VOR/DME 110.6T 122.1R
SLATE RUN VORTAC 113.9T 122.1R
ST MARYS RCO 121.3
ST THOMAS VORTAC 115.0T 122.1R
TIDIOUTE VORTAC 117.6T 122.1R
TYRONE VORTAC 114.9T 122.1R

BANGOR AFSS

AUGUSTA VOR/DME 111.4T 122.1R 122.2 122.6
BANGOR RCO 122.2
BELFAST RCO 121.975
BERLIN RCO 122.35
BUCKS HARBOR RCO 122.5
CARIBOU RCO **122.3**
CLAREMONT RCO 122.4
CONCORD RCO 122.2 **122.3**
FRYEBURG RCO 122.55
GREENVILLE RCO **122.3**
HOUTON VOR/DME 116.1T 122.1R 122.2
KEENE VORTAC 109.4T 122.1R
KENNEBUNK VORTAC 117.1T 122.1R
LEBANON VOR/DME 113.7T 122.1R 122.2 122.5
MANCHESTER VOR/DME 114.4T 122.1R
MILLINOCKET VOR/DME 117.9T 122.1R 123.6
PRINCETON VOR/DME 114.3T 122.1R
WATERBORO RCO 122.25
WHITEFIELD RCO 122.4

BRIDGEPORT AFSS

BOSTON VORTAC 112.7T 122.1R 122.4
BRIDGEPORT VOR/DME 108.8T 122.1R 122.2
CHESTER RCO 122.25
FITCHBURG RCO 118.025
GARDNER VORTAC 110.6T 122.1R
GROTON VOR 110.85T 122.1R
HYANNIS RCO 126.425
LAWRENCE VOR/DME 112.5T 122.1R
MADISON VOR/DME 110.4T 122.1R
MANSFIELD RCO 121.725
MARTHAS VINEYARD VOR/DME 114.5T 122.1R
NANTUCKET VOR/DME 116.2T 122.1R
NEW HAVEN VOR/DME 109.8T 122.1R
NORWICH VOR/DME 110.0T 122.1R
PROVIDENCE RCO 122.6
PUTNAM VOR/DME 117.4T 122.1R
QUONSET STATE RCO 122.3
WINDSOR LOCKS RCO 122.3
WORCESTER RCO 122.2

BUFFALO AFSS

BINGHAMTON VORTAC 112.2T 122.1R
BUFFALO RCO 122.1R 122.2 122.6
BUFFALO VOR/DME 116.4T
DUNKIRK VORTAC 116.2T 122.1R
ELMIRA RCO 122.2 122.4
ELMIRA VOR/DME 109.65T
GENESEO VOR/DME 108.2T 122.1R
GEORGETOWN VORTAC 117.8T 122.1R
HANCOCK VOR/DME 116.8T 122.1R
ITHACA VOR/DME 111.8T 122.1R
JAMESTOWN VOR/DME 114.7T 122.1R
ROCHESTER RCO 122.6
ROCKDALE VOR/DME 112.6T 122.1R
UTICA VORTAC 111.2T 122.1R 122.2 122.65
WELLSVILLE VORTAC 111.4T 122.1R

BURLINGTON AFSS

ALBANY VORTAC 115.3T 122.1R 122.2 **122.45**
BARNES VORTAC 113.0T 122.1R
BURLINGTON RCO 122.2 122.6
CHESTER VOR/DME 115.1T 122.1R
GLENS FALLS VORTAC 110.2T 122.1R 122.2 **122.4**
MASSENA RCO 122.2
MONTPELIER RCO 122.2 122.6
NEWPORT RCO 122.5
OGDENSBURG RCO **122.4**
PITTSFIELD RCO **122.05**
PLATTSBURGH VORTAC 116.9T 122.1R
RUTLAND RCO 122.3
SARANAC LAKE VOR/DME 109.2T 122.1R
SPRINGFIELD RCO 122.5
WATERTOWN VORTAC 109.8T 122.1R 122.2 **122.3**

ELKINS AFSS

BECKLEY VORTAC 117.7T 122.1R
BLUEFIELD VORTAC 110.0T 122.1R 122.2 122.65
CHARLESTON VORTAC 117.4T 122.1R 122.2 **122.55**
CLARKSBURG VOR/DME 112.6T 122.1R
CUMBERLAND RCO 122.35
ELKINS VORTAC 122.2 **122.45** 123.6 114.2T 122.1R
GRANTSVILLE VOR/DME 112.3T 122.1R
HENDERSON VORTAC 115.9T 122.1R
HUNTINGTON RCO 122.2 **122.6**
IVY KNOB RCO 124.3
KESSEL VOR/DME 110.8T 122.1R
MARTINSBURG RCO 122.45
MORGANTOWN VORTAC 111.6T 122.1R 122.6
PARKERSBURG VORTAC 108.6T 122.1R 122.4
RAINELLE VOR 116.6T 122.1R
WHEELING VOR/DME 118.65 112.2T 122.1R

LEESBURG AFSS 122.0 122.2 122.6

ARMEL VORTAC 113.5T 122.1R
BALTIMORE VORTAC 115.1T 122.1R 122.2
BROOKE VORTAC 114.5T 122.1R
BUCK'S ELBOW MOUNTAIN RCO 122.2 122.65
CAPE CHARLES VORTAC 112.2T 122.1R
CASANOVA VORTAC 116.3T 122.1R
CHARLOTTESVILLE RCO 122.2 122.65
DANVILLE VOR 113.1T 122.2
FALLS CHURCH RCO 122.2 122.6
FLAT ROCK VORTAC 113.3T 122.1R
FRANKLIN VORTAC 110.6T 122.1R
FREDERICK VOR 109.0T 122.1R
GLADE SPRING VOR/DME 110.2T 122.1R

GORDONSVILLE VORTAC 115.6T 122.1R
HAGERSTOWN VOR 109.8T 122.1R
HARCUM VORTAC 108.8T 122.1R
HOPEWELL VORTAC 112.0T 122.1R
LAWRENCEVILLE VORTAC 112.9T 122.1R
LINDEN VORTAC 114.3T 122.1R
LYNCHBURG VORTAC 109.2T 122.1R
MARTINSBURG VORTAC 112.1T 122.1R
MONTEBELLO VOR/DME 115.3T 122.1R
NEWPORT NEWS RCO 122.2 122.65
NORFOLK VORTAC 116.9T 122.1R
NOTTINGHAM VORTAC 113.7T 122.1R
PATUXENT VORTAC 117.6T 122.1R
PULASKI VORTAC 116.8T 122.1R 122.3
RICHMOND VORTAC 114.1T 122.1R 122.2 **122.4**
ROANOKE VORTAC 109.4T
ROANOKE RGML/WOODDRUM RCO 122.2 122.6 109.4T 122.1R
SALISBURY VORTAC 111.2T 122.1R 122.2 122.3
SNOW HILL VORTAC 112.4T 122.1R 122.6
SOUTH BOSTON VORTAC 110.4T 122.1R
WESTMINSTER VOR/DME 117.9T 122.1R

MILLVILLE AFSS

ATLANTIC CITY VORTAC 108.6T 122.55
BROADWAY RCO 122.35
CEDAR LAKE VORTAC 115.2T 122.1R
COLTS NECK RCO 122.3
COYLE VORTAC 113.4T 122.1R
DUPONT VORTAC 114.0T 122.1R
MILLVILLE RCO 122.1R 122.2 **122.65** 123.65
ROBBINSVILLE VORTAC 113.8T 122.1R 122.45
SEA ISLE VORTAC 114.8T 122.1R
SMYRNA VORTAC 111.4T 122.1R
SOLBERG VOR/DME 112.9T 122.1R
SPARTA RCO 122.5
STILLWATER VOR/DME 109.6T 122.1R
TEREBORO RCO 122.2 **122.65**
WATERLOO VOR/DME 112.6T 122.1R
WOODSTOWN VORTAC 112.8T 122.1R

NEW YORK IFSS

HAMPTON VORTAC 113.6T 122.1R 122.6
HUGUENOT VOR/DME 116.1T 122.1R
KENNEDY VOR/DME 115.9T 122.1R
KINGSTON VOR/DME 117.6T 122.1R
LA GUARDIA VOR/DME 113.1T
NEW YORK RCO 122.2 122.6
POUGHKEEPSIE RCO 122.2 122.4

WILLIAMSPORT AFSS

ALLENTOWN VORTAC 117.5T 122.1R
HARRISBURG VORTAC 112.5T 122.1R 122.2 122.4
LANCASTER VORTAC 117.3T 122.1R
MODENA VORTAC 113.2T 122.1R
NORTH PHILADELPHIA VOR 112.0T 122.2 122.6
POTTSTOWN VORTAC 116.5T
RAVINE VORTAC 114.6T 122.1R
SELINGSGROVE VORTAC 110.4T 122.1R
STONYFORK VOR/DME 108.6T 122.1R
WILKES-BARRE RCO 122.2 122.6
WILLIAMSPORT RCO 122.2 122.65
WILLIAMSPORT VOR/DME 114.4T 122.1R
YARDLEY VOR/DME 108.2T

FLIGHT STANDARDS DISTRICT OFFICES (FSDO)

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office-Federal Aviation Administration.

Flight Standards personnel in these offices are responsible for serving the aviation industry and the general public on all matters relating to the certification and operation of general aviation aircraft.

CONNECTICUT

1st Floor, Building 85-214
Bradley International Airport
Windsor Locks, Connecticut 06096-1009
Telephone: 860-654-1000

DISTRICT OF COLUMBIA

Hallmark Building
13873 Park Center Road, Suite 475
Herndon, VA 20171
Telephone: 703-230-7664
Fax: 703-230-7720

MAINE

Portland International Jetport
2 AL McKay Avenue
Portland, Maine 04102
Telephone: 207-780-3263

MARYLAND

890 Airport Park Road
Cromwell Business Park
Glen Burnie, Maryland 21061
Mailing Address
BWI Airport, Maryland 21240
Telephone: 410-787-0040

MASSACHUSETTS

One Cranberry Hill
Fourth Floor, Suite 402
Lexington, Massachusetts 02421-7394
Telephone: 781-274-7130
Fax: 781-274-6725

NEW JERSEY

Park 80 West, Plaza One
Saddlebrook, New Jersey 07663
Telephone: 201-556-6600

NEW YORK

7 Airport Park Boulevard
Latham, New York 12110
Telephone: 518-785-5660

Administrative Building, Suite 235

Route 110, Republic Airport

Farmingdale, New York 11735

Telephone: 631-755-1300

990 Stewart Ave., Suite 630

Garden City, NY 11530-4858

Telephone: 516-228-8033

#1 Airport Way, Suite 110

Rochester, New York 14624

Telephone: 585-436-3880

PENNSYLVANIA

Allegheny County Airport
3000 Lebanon Church Road, Suite 300
West Mifflin, Pennsylvania 15122
Telephone: 412-466-5357

Allentown-Bethlehem-Easton Airport
961 Marcon Blvd., Suite 111
Allentown, Pennsylvania 18103
Telephone: 610-264-2888

Capital City Airport
400 Airport Rd, Room 101
New Cumberland, Pennsylvania 17070
Telephone: 717-774-8271

International Plaza #2, 2nd Floor
Philadelphia, Pennsylvania 19113
Telephone: 610-595-1500

One Thorn Run Center, Suite 200
1187 Thorn Run Extension
Coraopolis, PA 15108
Telephone: 412-262-9034

VIRGINIA

Richmond Intl
5757 Huntsman Rd, Suite 100
Richmond, Virginia 23250-2415
Telephone: 804-222-7494

WEST VIRGINIA

Yeager Airport
301 Eagle Mountain Road, Room 144
Charleston, West Virginia 25311
Telephone: 304-347-5199

PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic, using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
5. Where more than one route is listed the routes have equal priority for use.
6. Official location identifiers are used in the route description for VOR/VORTAC navaids.
7. Intersection names are spelled out.
8. Navaid radial and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
9. Where two navaids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
11. (90–170 incl) altitude flight level assignment in hundred of feet.
12. The notations pressurized and unpressurized for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.

Sun	1300–2259 local time.
Mon thru Fri	0701–2259 local time.
Sat	0701–1459 local time.
14. Use current SIDs and STARs for flight planning.
15. For high altitude routes, the portion of the routes contained in brackets [] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

LOW ALTITUDE

Terminals	Route	Effective Times (UTC)
ALBANY (ALB)		
Boston (BOS)	(60–170 incl) V2 GDM GDM–STAR	1100–0300
Kennedy (JFK)	(60–170 incl, non-jet) V44 DPK	1100–0300
La Guardia (LGA)	(70–170 incl, less than 250 kts) V123	1100–0300
	or	
	(110–170 incl, 250 kts or more) IGN V157	
	HAARP	1100–0300
NE Philadelphia (PNE)	(90–170, non-turbojet) V14 CEDOR DNY051 DNY	
	LHY LV2 V613 FJC V149 MAZIE ARD	1100–0300
	or	
	(90–170, turbojet) V14 CEDOR DNY051 DNY LHY	
	LVZ V29 ETX V30 V149 MAZIE ARD	1100–0300
Newark (EWR)	(70–170 incl, non-turbojet) V489 COATE	1100–0300
	or	
	(110–170 incl, turbojet) V213	
	TALCO SHAFF–STAR	1100–0300
Philadelphia (PHL)	(60–170 incl less than 210 kts, non-turbojet)	
	V14 CEDOR DNY051 DNY V449 LHY V93 LVZ	
	V29 PTW	1100–0300
	or	

PREFERRED IFR ROUTES
**Effective
Times
(UTC)**

Terminals	Route	
	(60-170 incl 210 kts plus, non-turbojet) V14 CEDOR DNY051 DNY V449 LHY V93 LVZ V613 FJC PTW..... or (70-170 turbojets only) V14 CEDOR DNY051 DNY SLATT-STAR.....	1100-0300
Trenton (TTN)	(90-170, non-turbojet) V14 CEDOR DNY051 DNY LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300
	or (90-170, turbojet) V14 CEDOR DNY051 DNY LHY LVZ V29 ETX V30 V149 MAZIE ARD	1100-0300
BALTIMORE (BWI) —See Washington/Baltimore Metro		
BOSTON METRO AREA (BOS)		
Cleveland (CLE)	(60-170) MHT V490 UCA V2 SYR V84 GEE V464 V115 TDT V72 V232 CXR	1000-0300
Kennedy (JFK)	(110-170, jets) LUCOS SEY067 SEY PARCH CCC ROBER	1100-0300
	or (110-170, Props) LUCOS SEY067 SEY HTO V46 DPK	
	or (AOB 100) BOSOX V419 V14 ORW V16 DPK	
	(110-170 incl, more than 250 kts) BOSOX BDL BDL255 VALRE V157 HAARP	1100-0300
	or (110-170 incl, less than 250 kts) GLYDE BAF PWL V405 CASSH V123 HAARP	
La Guardia (LGA)	BOS V141 DRUNK	0000-2359
	(60-100, non-turbojet, water) ARCR SEY V268 HTO V139 BRIGS ACY V184 OOD	1100-0300
	or (90-170, non-turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300
	or (110-170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100-0300
	or (110-170, non-turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100-0300
	or (60-100, water) ARCR SEY V268 HTO V139 MANTA V276 ARD	1100-0300
	or (110-170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE-STAR	1100-0300
Newark (EWR)	(110-170 incl, props) GLYDE BAF V292 SAGES V489 COATE	1100-0300
	or (110-170, Jets) BOSOX BDL SHAFF-STAR	1100-0300
	(80-170 incl) ARCR SEY V268 HTO V308 DRIFT V312 CYN	1100-0300
	or (60-170, non-turbojet, >210 kts) V292 SAGES V408 LHY V93 LVZ V613 FJC PTW	1100-0300
Philadelphia (PHL)	(60-170 incl) MHT V490 UCA V2	1000-0300
	(60-170 incl) MHT V490 UCA V2	1000-0300
Rochester (ROC)	(60-100, water) ARCR SEY V268 HTO V139 MANTA V276 ARD	1100-0300
Syracuse (SYR)	or (110-170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100-0300
Trenton (TTN)	or (90-170, non-turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals

Washington Nati (DCA)	Route	
	(80–170 incl) ARKER AVONN V268 HTO V308 OTT	1100–0300
Wilmington (ILG)	(60–100, non-turbojet, water) ARCKER SEY V268 HTO V139 BRIGS ACY V184 OOD	1100–0300
	or (110–170, non-turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or (110–170, turbojets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
BRIDGEPORT (BDR)		
Baltimore (BWI)	(at or above FL170) BEADS V139 AVALO V268 BAL	
BUFFALO (BUF)		
Boston (BOS)	(60–170 incl) V252 GEE V14 GDM GDM–STAR	1100–0300
Chicago Midway (MDW)	(60–170 incl) V84 LAN V218 ELX V55 GIJ V156 V92 CGT	1100–0300
Chicago O'Hare (ORD)	(60–170 incl) V84 PAPPI	1100–0300
Cleveland (CLE)	(60–170 incl) V115 JHW V270 ERI V14 JFN CXR ..	1100–0300
Detroit Metro Wayne Co (DTW)	(60–170 incl) V2 YQO SPICA–STAR	1100–0300
Detroit Satellites:		
Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP)	(60–170 incl) V2 YQO	1100–0300
Elmira (ELM)	(60–170 incl) V14 GEE V147	1100–0300
Philadelphia (PHL)	(60–170 incl) V33 V210 BUNTS	
Pittsburgh (PIT)	(60–170 incl) V115 TDT CIP GRACE–STAR	1100–0300
Washington Nati (DCA)	(60–170 incl) V33 BFD V170 V93 BAL	1100–0300
CAPE COD (CPD)		
Atlantic City (ACY)	(60–100 singles) V34 SEY V268 HTO CCC V16 DIXIE V229	1000–0300
	or (AOB 100 all) V34 SEY V268 HTO V308 BRIGS ... or	1000–0300
	(AOB 100 all) V146 BAF V292 SAGES V408 LHY V106 LVZ V29 MXE V184	1000–0300
Dover AFB (DOV)	(60–100 singles) V34 SEY V268 HTO V46 DPK V16 ENO	1000–0300
	or (AOB 100 all) V34 SEY V268 ENO	1000–0300
	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V106 LVZ V29 ENO	1000–0300
Dubois (DUJ)	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V58 FQM V226 PARDY	1000–0300
Gaithersburg (GAI)	(60–100 singles) V34 SEY V268 HTO V46 DPK V16 ENO V268 BAL	1000–0300
	or (AOB 100 all) SEY HTO V268 EMI	1000–0300
	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V93 LRP V457 EMI	1000–0300
NE Philadelphia (PNE)	(60–100, single engine only) V34 SEY V268 HTO V46 DPK V16 CYN V312 OOD	1100–0300
	or (60–100, non-turbojet, water) ARCKER SEY V268 HTO V139 BRIGS ACY V184 OOD	1100–0300
	or (110–170, non-turbojet) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or (110–170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
	or (60–100, water) ARCKER SEY V268 HTO V139 MANTA V276 ARD	1100–0300

Terminals	Route	Effective Times (UTC)
Newark (EWR).....	or (110-170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100-0300
Newburgh (SWF).....	or (90-170, non-turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300
Trenton (TTN)	or (110-170, turbojet) BOSOX BDL SHAFF-STAR (AOB 100 all) PVD V405 BDL V205 TRESA	1100-0300
White Plains (HPN).....	or (60-100, water) ARCKER SEY V268 HTO V139 MANTA V276 ARD	1100-0300
Wilmington (ILG)	or (110-170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100-0300
Wilmington (ILG)	or (90-170, non-turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300
Wilmington (ILG)	or (AOA 110, 250 kts or less) PVD V146 BAF V106 PWL V405 CASSH V123 HAARP	1100-0300
Wilmington (ILG)	or (AOA 110, more than 250 kts) PVD PUT BDL IGN V157 HARRP	1100-0300
Wilmington (ILG)	or (60-100 single engine only) V34 SEY V268 HTO V46 DPK V16 CYN V312 OOD	1000-0300
Wilmington (ILG)	or (60-100, non-turbojet, water) ARCKER SEY V268 HTO V139 BRIGS ACY V184 OOD	1000-0300
Wilmington (ILG)	or (AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V106 LVZ V29 DQO	1000-0300
Wilmington (ILG)	or (110-170, non-turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100-0300
Wilmington (ILG)	or (110-170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE-STAR	1100-0300
CHARLESTON (CRW)		
Pittsburgh (PIT).....	(60-170 incl) V115 JPU V117 WISKE WISKE-STAR	
KENNEDY (JFK) —See New York Metro Area		
LA GUARDIA (LGA) —See New York Metro Area		
MONTREAL (CYUL)		
Newark (EWR).....	(80-170 incl, 250 kts or less) V282 SLK V203 ALB V489 COATE	1100-0300
Baltimore (BWI)	or (110-170 incl, more than 250 kts) V282 SLK V203 ALB V213 SAX	1100-0300
NEW HAVEN (HVN)		
Baltimore (BWI)	(at or above FL170) BEADS V139 AVALO V268 BAL	
NEW YORK METRO AREA		
From KENNEDY (JFK) only		
Albany (ALB)	(70-170 incl) BDR V487 CANAN V130	1100-0300
Baltimore (BWI)	(90-170 incl, 250 kts or less) WHITE V1 LEEAH V268	1100-0300
Boston (BOS)	or (140-170 incl, more than 250 kts) RBV RBV274 MXE056 V378 BAL	1100-0300
Boston (BOS)	(110-170, turbojet) MERIT ORW PVD ORW-STAR or (110-170, non-turbojet) MERIT ORW V16 WOONS	1100-0300

**Effective
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(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Burlington (BTV)	(90–170 incl) BDR V487	1100–0300
Hagerstown (HGR).....	(140–160) RBV V276 V162 HAR V377	1100–0300
	or	
	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HAR V377.....	
Harrisburg (MDT)	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HWANG	1100–0300
	or	
	(140–160 incl) RBV V276 V162 HWANG	1100–0300
	or	
	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HYPER V143 ROBRT AML	1100–0300
Montreal (CYUL)	(110–170) BDR V487 BTV V91 NAPEE	1100–0300
Norfolk (ORF)	(90–170 incl, more than 250 kts) WAVEY PLUME V139 CCV	1100–0300
	or	
	(90–170 incl, 250 kts or less) WHITE V1 CCV	1100–0300
Portland (PWM).....	(110–170) MERIT HFD EEN CON CON061 NEETS	1100–0300
Providence (PVD)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100–0300
Rochester (ROC)	(90–130 incl) HAAYS HUO V252 GIBBE	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB V252 GIBBE	1100–0300
Rome (RME)	(90–170) HAAYS V273 V449 DNY V249 UCA.....	1100–0300
Syracuse (SYR)	(90–130 incl) HAAYS HUO V252 CFB V29	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB	1100–0300
Toronto (CYYZ)	(90–130 incl) COATE V126 LHY ULW V36	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB V270 ULW V36	1100–0300
Washington Dulles (IAD)	(140–170 incl, jets) RBV V276 V457 LRP V143 MULRR AML	1100–0300
	or	
	(140–170 incl, props) RBV V276 V39 LRP V143 MULRR AML	1100–0300
Washington Natl (DCA)	(80–170 incl, 250 kts or less) V1 LEEAH V229 V308 OTT	1100–0300
	or	
	(80–170 incl, more than 250 kts) WAVEY PLUME V308 BILIT	1100–0300
From LA GUARDIA (LGA) only		
Albany (ALB)	(70–170 incl) BDR V487 CANAN V130	1100–0300
Baltimore (BWI)	(90–170 incl) BIGGY V3 MXE V378 BAL	1100–0300
Binghamton (BGM)	(90–170 incl) HAAYS HUO V252 CFB	1100–0300
Boston (BOS)	(110–170 turbojet) MERIT ORW PVD ORW-STAR ..	1100–0300
	or	
	(110–170 non-turbojet) MERIT ORW V16 WOONS	1100–0300
Cleveland (CLE)	(90–100 incl) LANNA V30 SEG V6 YNG CXR	1100–0300
	or	
	(140–170 incl.) ELIOT V39 ETX V30 SEG V6 YNG CXR	1100–0300
Elmira (ELM)	(90–170 incl) COATE V126 LHY ULW	1100–0300
Harrisburg (CXY)	(90–100) LANNA V30 ETX V162 HWANG	1100–0300
	or	
	(110–170 incl) ELIOT V39 ETX V162 HWANG	1100–0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100–0300
Martha's Vineyard (MVY)	(110–170 incl) BAYYS V229 SEALL V188 GON V374	1100–0300
Montreal (CYUL)	(70–170 incl) BDR V91 BOWAN V487 BTV V91 NAPEE	1100–0300
Nantucket (ACK)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100–0300
Norfolk (ORF)	(90–170 incl) WHITE V1 CCV	1100–0300
Pittsburgh (PIT)	(90–100 incl) LANNA V30 PSB GRACE-STAR	1100–0300

Terminals	Route	Effective Times (UTC)
Portland (PWM)	or (140-170 incl) ELIOT V39 ETX V30 PSB GRACE-STAR	1100-0300
Providence (PVD)	(110-170 all) MERIT HFD EEN CON CON061 NEETS	1100-0300
Richmond (RIC)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100-0300
Rochester (ROC)	(90-170 incl) WHITE V1 CCV HPW	1100-0300
Rome (RME)	(90-170 incl) HAAYS HUO V252 GIBBE	1100-0300
Syracuse (SYR)	HAAYS V273 V449 DNY V249 UCA	1100-0300
	(90-170 incl, less than 250 kts) HAAYS HUO V252 CFB V29	1100-0300
	or (90-170 incl, 250 kts plus) GAYEL CFB	1100-0300
Toronto (CYYZ)	(90-170 incl) COATE V126 LHY ULW V36	1100-0300
Washington Dulles (IAD)	(140-170 incl, jets) PARKE V457 LRP V143 MULRR AML	1100-0300
	or (140-170 incl, props) ELIOT V39 LRP V143 MULRR AML	1100-0300
	or (90-130 incl, props) LANNA V30 ETX V39 LRP V143 ROBRT AML	1100-0300
Washington Natl (DCA)	(90-170 incl, props) BIGGY V3 MXE V378 BAL ..	1100-0300
Wilkes-Barre/Scranton (AVP)	(90-170 incl) COATE V188 LVZ	1100-0300
From NEWARK (EWR) only		
Albany (ALB).....	(70-170 incl, turbojets) BDR V487 CANAN V130 . or (70-170 less than 210 kts) BREZY V39 SOARS V487 CANAN V130	1100-0300
	or (70-170, greater than 210 kts) HAAYS V273 V449	1100-0300
Baltimore (BWI)	(90-170 incl) BIGGY V3 MXE V378	1100-0300
Bedford (BED)	(110-170 incl) MERIT HFD GRAYM-STAR	1100-0300
Binghamton (BGM)	(90-170 incl) HAAYS HUO V252 CFB	1100-0300
Boston (BOS)	(110-170, turbojet) MERIT ORW PVD ORW-STAR . or (110-170, non-turbojet) MERIT ORW V16 WOONS	1100-0300
Buffalo (BUF)	(90-170 incl) COATE V126 LHY ULW ULW306 BENE	1100-0300
Burlington (BTV)	(110-170 incl) GREKI V39 SOARS V487	1100-0300
Cleveland (CLE)	(90-100 incl) LANNA V30 SEG V6 YNG CXR .. or (140-170 incl) ELIOT V39 ETX V30 SEG V6 YNG CXR	1100-0300
Elmira (ELM)	(90-170 incl) COATE V126 LHY ULW	1100-0300
Harrisburg (CXY)	(90-100 incl) LANNA V30 ETX V162 HWANG .. or (110-170 incl) ELIOT V39 ETX V162 HWANG	1100-0300
Hyannis (HYA)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 MVY	1100-0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100-0300
Martha's Vineyard (MVY)	(110-170 incl) BAYYS V229 SEALL V188 GON V374	1100-0300
Martinsburg (MRB)	(90-100) LANNA V30 ETX V39	1100-0300
	or (110-170 incl) ELIOT V39	1100-0300
Martin State (MTN)	(90-170 incl) BIGGY V3 MXE V408 VINNY V93 SKILS	1100-0300
Montreal (CYUL)	(70-170 incl) BDR V91 BOWAN V487 BTV V91 NAPEE	1100-0300
Nantucket (ACK)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100-0300
Norfolk (ORF)	(90-170 incl) WHITE V1 CCV	1100-0300

PREFERRED IFR ROUTES

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Terminals

	Route	
Norwood (OWD)	(110-170 incl) MERIT ORW V16 WOONS	1100-0300
Pittsburgh (PIT)	(90-100 incl) LANNA V30 PSB GRACE-STAR	1100-0300
	or	
	(140-170 incl.) ELIOT V39 ETX V30 PSB GRACE-STAR	1100-0300
Portland (PWM)	(110-170, all) MERIT HFD EEN CON CON061 NEETS	1100-0300
Providence (PVD)	(110-170 incl) BAYYS SEALL V188 GON V374 MINNK	1100-0300
Richmond (RIC)	(90-170 incl) WHITE V1 CCV HPW	1100-0300
Rochester (ROC)	(90-170 incl) HAAYS HUO V252 GIBBE	1100-0300
Rome (RME)	(90-170, all others) HAAYS V273 V449 DNY V249 UCA	1100-0300
Syracuse (SYR)	(90-170 incl, less than 250 Kts) HAAYS HUO V252 CFB V29	1100-0300
	or	
	(90-170 incl, 250 Kts plus) GAYEL CFB	1100-0300
Toronto (CYYZ)	(90-170 incl) COATE V126 LHY ULW V36	1100-0300
Washington Dulles (IAD)	(140-170 incl, jets) PARKE V457 LRP V143 MULRR AML	1100-0300
	or	
	(140-170 incl, props) ELIOT V39 LRP V143 MULRR AML	1100-0300
	or	
	(90-130 incl, props) LANNA V30 ETX V39 LRP V143 MULRR AML	1100-0300
Washington Nati (DCA)	(90-170 incl , props) BIGGY V3 MXE V378 BAL ..	1100-0300
Wilkes-Barre/Scranton (AVP)	(90-170 incl) COATE V188 LVZ	1100-0300
From WHITE PLAINS (HPN) only		
Albany (ALB)	(70-170 incl) BDR V487 CANAN V130	1100-0300
Baltimore (BWI)	(90-170 incl) BIGGY V3 MXE V378 BAL	1100-0300
Binghamton (BGM)	(90-170 incl) HAAYS HUO V252 CFB	1100-0300
Boston (BOS)	(110-170 turbojet) MERIT ORW PVD ORW-STAR ..	1100-0300
	or	
	(110-170 non-turbojet) MERIT ORW V16 WOONS	1100-0300
Cleveland (CLE)	(90-170 incl) COATE V126 LHY V58 PSB V6 YNG CXR	1100-0300
Elmira (ELM)	(90-170 incl) COATE V126 LHY ULW	1100-0300
Harrisburg (CXY)	(90-100) LANNA V30 ETX V162 HWANG	1100-0300
	or	
	(110-170 incl) ELIOT V39 ETX V162 HWANG	1100-0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100-0300
Martha's Vineyard (MVY)	(110-170 incl) BAYYS V229 SEALL V188 GON V374	1100-0300
Montreal (CYUL)	(70-170 incl) GREKI V39 SOARS V487 BTV V91 NAPEE	1100-0300
Nantucket (ACK)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100-0300
Norfolk (ORF)	(90-170 incl) WHITE V1 CCV	1100-0300
Norwood (OWD)	(110-170 incl) MERIT ORW V16 WOONS	1100-0300
Pittsburgh (PIT)	(90-170 incl) COATE V126 LHY V58 PSB GRACE-STAR	1100-0300
Portland (PWM)	(110-170, all) MERIT HFD EEN CON CON061 NEETS	1100-0300
Providence (PVD)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100-0300
Richmond (RIC)	(110-170 incl) WHITE V1 CCV HPW	1100-0300
Rochester (ROC)	(90-170 incl) HAAYS HUO V252 GIBBE	1100-0300
Syracuse (SYR)	(90-130 incl) HAAYS HUO V252 CFB V29	1100-0300
	or	
	(140-170 incl) HAAYS HUO V252 CFB	1100-0300
Toronto (CYYZ)	(90-170 incl) COATE V126 LHY ULW V36	1100-0300

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
Washington Dulles (IAD)	(140-170 incl, jets) PARKE V457 LRP V143 MULRR AML or (140-170 incl, props) ELIOT V39 LRP V143 MULRR AML or (90-130 incl, props) LANNA V30 ETX V39 LRP V143 MULRR AML	1100-0300 1100-0300 1100-0300 1100-0300 1100-0300 1100-0300
Washington Natl (DCA)	(90-170 incl , props) BIGGY V3 MXE V378 BAL ..	1100-0300
Wilkes-Barre/Scranton (AVP)	(90-170 incl) COATE V188 LVZ	1100-0300
NORFOLK METRO AREA		
Baltimore (BWI)	HPW V213 PXT V93 GRACO	1100-0300
Kennedy (JFK)	(90-170 incl, 250 kts or less) SCHOL SBY200 V139 SIE V44 PANZE V184 ZIGGI or (90-170 incl, more than 250 kts) SCHOL SBY200 V139 SIE CAMRN-STAR	1100-0300 1100-0300
La Guardia (LGA)	(90-170, non-jet) SCHOL SBY200 SBY V29 DQO V479 RUUTH V123 RENUE or (90-170 incl, more than 250 kts, non-jet) SCHOL SBY200 SBY V29 V445 NANCI	1100-0300 1100-0300
Newark (EWR)	(110-170 incl, turbojets only) HPW V213 PXT DYLIN-STAR or (non-jets, 180 kts or greater) HPW V213 PXT PXT023 GATBY V445 DQO V479 RUUTH V123 RBV RBV005 OWBIE or (50-90 incl, non-jet, less than 180 kts) SCHOL SBY V29 MXE ARD V214 METRO	1100-0300 1100-0300
Philadelphia (PHL).....	(70-170 incl) SCHOL SBY200 V139 SWL SWL034 RADDS VCN-STAR	1100-0300
Teterboro (TEB)	(advanced navigation, turbojets only) HPW V213 PXT JAIKE-STAR or (turboprop) HPW V213 PXT PXT023 GATBY V445 DQO DQ0029 V3 SBJ TEB	1100-0300 1100-0400
Washington Dulles (IAD)	(jet only) HPW RIC COATT-STAR	1100-0300
Washington Natl (DCA)	(Non-Jet) HPW RIC RIC345 COATT V155 BRV BRV007 BARIN HPW RIC IRONS-STAR	1100-0300 1100-0300
PHILADELPHIA METRO AREA		
Binghamton (BGM)	(90-170 incl) PTW PTW320 V499 CFB	1100-0300
Boston (BOS)	(90-170 incl) DITCH V312 DRIFT V308 ORW V16 WOONS	1100-0300
Buffalo (BUF)	(90-170 incl) PTW PTW320 V499 V164 FQM V31 ULW ULW306 BENEE	1100-0300
Cleveland (CLE)	(60-170 incl) MXE V474 IHD V119 GALLS V214 AIR V8 BSV KEATN-STAR	1100-0300
Detroit Metro-Wayne Co (DTW)	(60-170 incl) PTW PTW320 V276 RAV V170 ERI SPICA-STAR	1100-0300
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	PTW PTW320 V276 RAV V170 ERI	
Elmira (ELM)	(90-170 incl) PTW PTW320 V499 V164 FQM V31 ULW	1100-0300
Kennedy (JFK)	(110-170, turbojets only) DITCH V312 V44 CAMRN	1100-0300
Norfolk (ORF)	(80-170 incl) OOD SBY V1 CCV	1100-0300
Richmond (RIC)	(80-170 incl) OOD OOD198 V229 PXT V16	1100-0300

**Effective
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Terminals

	Route	
Syracuse (SYR)	(90-170 incl) PTW PTW320 V499 CFB V29	1100-0300
Toronto (CYYZ)	(90-170 incl) PTW PTW320 V499 V164 FQM V31 ULW V36	1100-0300
Washington Dulles (IAD)	(90-170 incl, turbojets only) MXE V474 V143 MULRR AML	1100-0300
Washington Natl (DCA)	(Turbojets only) MXE V378 BAL	1100-0300
White Plains (HPN)	(90-170 incl, props) DITCH V312 DRIFT V139 RICED RICED-STAR	1100-0300
Windsor Locks (BDL)	(90-170 incl) DITCH V312 DRIFT V139 MAD193 MAD MAD341 BRISS	1100-0300

PITTSBURGH METRO AREA (PIT)

Baltimore (BWI)	(90-170 incl) MGW V44 MRB V3 EMI	1100-0300
Boston (BOS)	(60-170) TON V35 ULW V72 ALB V2 GDM GDM-STAR	1100-0300
Buffalo (BUF)	(60-170 incl) EWC FKL DKK DKK020 WELLIA	1100-0300
Chicago Midway (MDW)	(60-170 incl) BSV V8 FDY V422 CGT	1100-0300
Chicago O'Hare (ORD)	BSV V8 FDY V422 OXI V340 BEARZ	1100-0300
Cleveland (CLE)	(60-170 incl) BSV KEATN-STAR	1100-0300
Columbus (CMH/TZR)	(60-170 incl) TVT V43 APE	1100-0300
Detroit Metro-Wayne Co (DTW)	(60-170 incl) BSV DJB DBJ314 GEMINI GEMNI-STAR	1100-0300

Detroit Satellites:

Ann Arbor (ARB), Willow Run (YIP).....	(60-170 incl) EWC V37 ERI V221 V2	1100-0300
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	(60-170 incl) BSV V40 DJB LLEEO-STAR	1100-0300
Harrisburg (MDT)	(60-170 incl) REC V210 HAR	1100-0300
Indianapolis (IND)	(60-170 incl) TVT V210 MIE CLANG-STAR	1100-0300
Kennedy (JFK)	(90-170 incl) TON PSB V6 SBJ V232 COL	1100-0300
La Guardia (LGA)	TON PSB V6 LIZZI	
Newark (EWR)	(70-170 incl, 250 kts or less) TON V35 PSB V58 FQM PENNS-STAR	1100-0300
Philadelphia (PHL)	(60-170 incl) REC V210 BUNTS	1100-0300
Washington Natl (DCA)	(90-170 incl) MGW V144 ESL V4 AML	1100-0300
White Plains (HPN)	(60-170 incl, props) TON PSB V58 IGN NOBBI- STAR	1100-0300

PROVIDENCE (PVD)

La Guardia (LGA)	(110-170 incl, more than 250 kts) PUT BDL BDL255 VALRE V157 HAARP	1100-0300
	or	
	(110-170 incl, less than 250 kts) V146 BAF V106 PWL V405 CASSH V123 HAARP	1100-0300
	(110-170 incl, turbojets) PUT BDL SHAFF-STAR ..	1100-0300
	or	
	(110-170 incl, non-turbojet) PUT V146 BAF V292 V489 COATE	1100-0300

ROCHESTER (ROC)

Baltimore (BWI)	(90-170 incl) V147 ULW V31 HAR V265 EMI	1100-0300
Boston (BOS)	(60-170 incl) FAULT V31 BEEPS V14 GDM GDM-STAR	1100-0300
Detroit Metro Wayne Co (DTW)	(60-170 incl) V31 AIRCO BUF V2 YQO SPICA-STAR	1100-0300

Detroit Satellites:

Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	(60-170 incl) V31 AIRCO BUF V2 YQO	1100-0300
Kennedy (JFK)	(90-170 incl, props) V34 BEEPS RKA V433 PWL V44 DPK	1100-0300
Philadelphia (PHL)	(70-170 incl) V147 ULW V31 FQM MIP RAV V170 V210 BUNTS	1100-0300
Washington Natl (DCA)	(90-170 incl, jet only) V147 ULW V35 PSB PSB149 SHILO V93 BAL	1100-0300
	or	
	(90-170 incl, non-jet) V147 ULW V31 HAR V265 KRANT	1100-0300

PREFERRED IFR ROUTES

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Terminals	Route	
SYRACUSE (SYR)		
Boston (BOS)	(60–170 incl) V14 GDM GDM-STAR	1100–0300
Kennedy (JFK)	(70–170 incl, non-jet) V433 LOVES V44 DPK	1100–0300
Newark (EWR)	(110–170 incl, turbojets) V273 HNK SHAFF-STAR	1100–0300
	..... or (70–170 incl, all other types) V273 HNK V167	
	WEARD V489 COATE	1100–0300
WASHINGTON/BALTIMORE METRO AREA		
From BALTIMORE (BWI) only		
Albany (ALB)	V93 LRP V499 CFB V270 DNY V449	1100–0400
Binghamton (BGM)	V93 LRP V499 CFB	1100–0300
Boston (BOS)	(90–170 incl props) PALEO-DP SIE V308 ORW V16 WOONS	1100–0300
Bridgeport (BDR)	(90–170 incl) PALEO-DP SIE V139 RICED MAD193 KEYED	1100–0300
Buffalo (BUF)	V93 SHILO PSB149 KOLBY V265 HAR V31 FQM V164	1100–0300
Charlottesville (CHO)	(below 110) V44 MRB V143 CEROL	1100–0300
	..... or (110–170) FLUKY GVE	
Cleveland (CLE)	MRB V501 THS V469 JST V297 TALLS V10 YNG CXR	1100–0300
Detroit Metro-Wayne Co (DTW)	(turbojets only) MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI -STAR	1100–0300
	..... or (props only) MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN	
Detroit Satellites:		
Ann Arbor (ARB), Willow Run (YIP)	MRB V501 THS V469 JST EWC ERI	
Coleman A Young (DET), Pontiac (PTK),		
Windsor (CYQG)	MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO-STAR	
Greensboro (GSO)	(70–170 incl, non-jet) V44 MRB V143 LYH V222 HENBY	0000–2359
Hartford (HFD)	(90–170 incl) PALEO-DP V308 GON V58	1100–0300
Islip (ISP)	(90–170 incl) PALEO-DP SIE V139 SARMI CCC	1100–0300
Kennedy (JFK)	(90–170 incl, 250 kts or greater) PALEO-DP ACY V229 PANZE V44 CAMRN	1100–0300
	..... or (90–170 incl, less than 250 kts) PALEO-DP ACY V184 ZIGGI	
Knoxville (TYS)	V44 MRB V143 MOL ROA V16	1100–0300
La Guardia (LGA)	(Turbojets only) PALEO-DP V44 AGARD KORRY-STAR	1100–0400
	..... or (Non-turbojets) SWANN-DP DQ0 V479 RUUTH V123 RENUE	
Nantucket (ACK)	(90–170 incl) POLLA V312 PALEO V44 SIE V139 HTO V46	1100–0300
	..... or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR V475 V188 GON V374 MVY	
Newark (EWR)	(110–170 incl, turbojets only) SWANN-DP V445 DQ0 DYLIN-STAR	1100–0300
	..... or (110–170 incl, non-turbojet, greater than 180 kts) SWANN-DP V445 DQ0 V479 RUUTH V123 RBV RBV005 OWBIE	
Newburgh (SWF)	V93 LHY V408 FILPS V483	1100–0300
New Haven (HVN)	(90–170 incl) PALEO-DP SIE V139 RICED MAD193 KEYED	1100–0300
Norfolk (ORF)	(70–170 incl, non jet) V93 PXT V16 COLIN V33 V286 STEIN	1100–0300
	..... or	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals

Route	Effective Times (UTC)
Philadelphia (PHL)	1100-0300
Pittsburgh (PIT)	1100-0300
Poughkeepsie (POU)	1100-0300
Rochester (ROC)	1100-0300
Syracuse (SYR)	1100-0300
Teterboro (TEB)	1100-0300 1100-0300
White Plains (HPN)	1100-0300 1100-0300 1100-0300
From WASHINGTON DULLES INTL (IAD) only	
Bridgeport (BDR)	(90-170 incl) WOOLY V214 BAL V44 SIE V139 RICED MAD193 KEYED
Buffalo (BUF)	1100-0300
Detroit Metro-Wayne Co (DTW)	(70-170 incl, non-jet) MRB HGR V501 THS TON ELZ V164
	(Turbojets only) MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI -STAR
	or
	(Non-turbojet) MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN
Detroit Satellites:	
Ann Arbor (ARB), Willow Run (YIP)	MRB V501 THS V469 JST EWC ERI
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO-STAR
Greensboro (GSO)	(70-170 incl, non-jet) CSN V140 MOL V143 LYH V222 HENBY
Islip (ISP)	(90-170 incl) WOOLY V214 BAL V44 SIE V139 SARDI CCC
Kennedy (JFK)	(90-170 incl, 250 Kts or greater) PALEO V44 DONIL V229 PANZE V44 CAMRN
	or
	(90-170 incl, less than 250 Kts) WOOLY V44 DONIL V229 ACY V184 ZIGGI
La Guardia (LGA)	(110-170 incl, turbojets only) PALEO V44 AGARD KORRY-STAR
	or
	(90-170 incl, non turbojets) WOOLY V214 DQO V479 V123 RENUE
Newark (EWR)	(110-170 incl, turbojets only) AML SWANN V445 DQO DYLIN-STAR
	or
	(110-170 incl, non-turbojet, more than 180 kts) WOOLY V214 SWANN RUUTH-STAR
Newburgh (SWF)	MRB V501 HGR V377 AML009 SEG230 SEG V106 LHY V408 V483 FILPS
New Haven (HVN)	(90-170 incl) WOOLY V214 BAL V44 SIE V139 RICED MAD193 KEYED
Philadelphia (PHL)	1100-0300
Pittsburgh (PIT)	1100-0300
Raleigh-Durham (RDU)	1100-0300
Rochester (ROC)	1100-0300
Syracuse (SYR)	1100-0300 1100-0300
Teterboro (TEB)	1100-0300 1100-0300 1100-0300

Terminals	Route	Effective Times (UTC)
White Plains (HPN)	(non-jet, 180 kts or greater) SWANN V445 DQO DQ0029 V3 SBJ TEB	1100-0300
	(90-170 incl) WOOLY V44 SIE V139 RICED- RICED- STAR	
	or	
	(70) MRB V501 HGR V377 HAR V162 ETX FJC BWZ SAX V39 BREZY	1100-0300
From WASHINGTON NATIONAL (DCA) only		
Albany (ALB)	KRANT V265 EMI V457 LRP V499 CFB V270 DNY V449	1100-0300
Allentown (ABE)	KRANT V265 EMI V457 LRP V39 ETX FJC	1100-0300
Altoona (AOO)	KRANT V265 V214 MRB JST AOO	1100-0300
Atlantic City (ACY)	(90-170) PALEO V44 SIE	
	or	
	(70) POLLA V312 GOLDA V268 LEEAH	1100-0300
Barnes (Westfield) (BAF)	(90-170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 MAD MAD341 BRISS	1100-0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 BDR BDR014 JUDDS BAF	1100-0300
Bedford (BED)	POLLA V312 PALEO V44 SIE V308 ORW GRAYM-STAR	1100-0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 HFD HFD053 DREEM	1100-0300
Binghamton (BGM)	KRANT V265 EMI V457 LRP V499 CFB	1100-0300
Boston (BOS)	(90-170 incl) POLLA V312 PALEO V44 SIE V308 ORW V16 WOONS	1100-0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 HFD V3 WOONS	1100-0300
Bridgeport (BDR)	KRANT V265 EMI V457 LRP V93 LHY V106 PWL V44 DENNA	1100-0300
	or	
	(90-170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 KEYED	1100-0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 BDR	1100-0300
Buffalo (BUF)	EMI V265 HAR V31 FQM V164	1100-0300
Burlington (BTV)	KRANT V265 EMI V457 LRP V93 LHY V449 ALB ..	1100-0300
Butler (BTP)	KRANT V265 EMI V268 NESTO	1100-0300
Charleston (CRW)	LDN LDN275 V286 EKN V4 HVQ	1100-0300
Clarksburg (CKB)	LDN LDN275 V286 EKN CKB	1100-0300
Cleveland (CLE)	KRANT V265 V214 MRB V501 THS V469 JST V297 TALLS V10 YNG CXR	1100-0300
Concord (CON)	(90-170) POLLA V312 PALEO V44 SIE V139 HTO V308 ORW V14 GDM V39	1100-0300
Detroit Metro-Wayne Co (DTW)	(Turbojet only) KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI-STAR	
	or	
	(Non-turbojet only) KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN	1100-0200

**Effective
Times
(UTC)**

Terminals**Route**

Detroit Satellites:		
Ann Arbor (ARB), Willow Run (YIP).....	KRANT V265 V214 MRB V501 THS V469 JST EWC ERI	
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO-STAR	
Dover (AFB (DOV)	(70) PALEO V312 GOLDA V268 ENO DOV	
Erie (ERI)	KRANT V265 V214 MRB JST CIP V276	1100-0300
Farmingdale (FRG)	(90-170) PALEO V44 DONIL V229 PANZE V44 CAMRN	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK	1100-0300
	or (90-170 , less than 250 kts) PALEO V44 DONIL V229 ACY V184 ZIGGI FRG	
	(70-170 incl, non-jet) CSN V140 MOL V143 LYH V222 HENBY	0000-2359
Greensboro (GSO)	(90-170) POLLA V312 PALEO V44 SIE V139 HTO HT0034 MONDI	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD MAD126 MONDI	1100-0300
Groton (GON)	V265 EMI EMI325 HGR089	1100-0300
Hagerstown (HGR)	KRANT V265 EMI V265	1100-0300
Harrisburg (MDT/CXY)	(90-170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 MAD V1	
Hartford (HFD)	or (70) POLLA V312 GOLDA V268 ENO V16 JFK	1100-0300
IIslip (ISP)	(90-170) POLLA V312 PALEO V44 SIE V139 SARDI CCC	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK	1100-0300
Kennedy (JFK)	(90-170 incl, 250 kts or greater) POLLA V312 PALEO V44 DONIL V229 PANZE V44 CAMRN	
	or (90-170 incl, less than 250 kts) POLLA V312 PALEO V44 DONIL V229 V184 ZIGGI	1100-0300
La Guardia (LGA)	PALEO V44 AGARD KORRY-STAR	1100-0300
Martha's Vineyard (MVY)	(90-170) POLLA V312 PALEO V44 SIE V139 HTO V46 FLAPE	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V374	1100-0300
Morgantown (MGW)	LDN V144	1100-0300
Nantucket (ACK)	(90-170) POLLA V312 PALEO V44 SIE V139 HTO V46	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR V475 MAD V475 V188 GON V374 MVY	1100-0300
Newark (EWR)	(advanced navigation, turbojets only) SWANN V445 DQO DYLIN-STAR	
	or (piston) SWANN V445 DQO V29 MXE ARD V214 METRO	1100-0300
	or (turboprops) SWANN V445 DQO V479 RUUTH V123 RBV RBV005 OWBIE	
Newburgh (SWF).....	KRANT V265 EMI V457 LRP V93 LHY V408 V483 FILPS	1100-0300
New Haven (HVN)	(90-170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 KEYED	
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR	1100-0300
Norfolk (ORF)	DAILY V33 V286 STEIN	
		1100-0300

Terminals	Route	Effective Times (UTC)
Philadelphia (PHL)	(110 , jets) MITCH V445 DQO or (Props to PHL and Satellites) PALEO V170 DQO .. KRANT V265 V214 MRB V214 GRV IHD NESTO-STAR	1100-0300
Pittsburgh (PIT)	(90-170) POLLA V312 PALEO V44 SIE V139 HTO ORW GDM CON CON061 NEETS	1100-0300
Portland (PWM)	(70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD V1 HFD V229 GDM V106 ENE KRANT V265 EMI V457 LRP V93 LHY V408 V483 FILPS	1100-0300
Poughkeepsie (POU)	(90-170 advanced RNAV only) POLLA V312 PALEO V44 SIE V139 HTO JORDAN (RNAV)-STAR	1100-0300
Providence (PVD)	KRANT V265 EMI V265 HAR V31 GIBBE KRANT V265 EMI V457 LRP V499 CFB UCA KRANT V265 HAR V31 FQM V423 CFB V29..... (advanced navigation, turbojets only) SWANN JAIKE-STAR	1100-0300
Rochester (ROC)	or	1100-0400
Rome (RME)	(turboprop) SWANN V445 DQO DQ0029 V3 SBJ ..	1100-0400
Syracuse (SYR)	(70) KRANT V265 EMI LRP ETX FJC BWZ SAX V39 BREZY	1100-0300
Teterboro (TEB)	or (90-170) PALEO V44 SIE V139 RICED RICED-STAR	1100-0300
White Plains (HPN)	or (70, less than 180 kts) POLLA V170 ODESA MXE ARD V214 METRO V249 SAX V39 BREZY	1100-0300
Wilkes Barre/Scranton (AVP)	KRANT V265 EMI V457 LRP V93 LVZ	1100-0300
Windsor Locks (BDL)	(210 kts or less) KRANT V265 EMI V457 V93 LHY V106 PWL V34 MOONI V58 JUDDS	1100-0300
	or (90-170) POLLA V312 PALEO V44 SIE V139 HTO V308 ORW V130	1100-0300
	or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR BDR014 JUDDS V419 BRISS BDL ...	1100-0300
WINDSOR LOCKS (BDL)		
Islip (ISP)	(110-170 incl) HFD V58 GON V308 BOROS CCC ..	1000-0300
NE Philadelphia (PNE)	(110-170, non-turbojet) HFD V58 THUMB HTO V139 BRIGS CEDAR LAKE-STAR	1100-0300
	or	
	(110-170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100-0300
	or	
	(90-170, non-turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100-0300
	or	
	(90-170, jets) V292 SAGES V408 LHY LVZ V29 ETX V30 V149 MAZIE ARD	1100-0300
Newark (EWR)	(70-170 incl, 250 kts or less) SASHA V292 V489 COATE	1100-0300
	or	
	(110-170 incl, more than 250 kts) SASHA V292 V312 SAX	1100-0300
Philadelphia (PHL)	(110-170 incl, non-turbojet) HFD V58 THUMB HTO V139 BRIGS ACY V184 OOD	1100-0300
	or	

Terminals

	Route	Effective Times (UTC)
Trenton (TTN)	(60–170 incl, props less than 210 kts) SASHA V292 SAGES V408 LHY LVZ V29 SLATT V6 FJC V149 MAZIE or (60–170 incl, props 210 kts plus) SASHA V292 SAGES V408 LHY LVZ V29 SLATT V6 FJC V149 MAZIE or (60–170 incl, turbojets) SASHA V292 SAGES V408 LHY LVZ V147 MAZIE (110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD..... or (90–170, non-turbojet) V292 SAGES V408 LHY LVS V613 FJC V149 MAZIE ARD or (90–170, jets) V292 SAGES V408 LHY LVS V29 ETX V30 V149 MAZIE ARD..... (110–170, non-turbojet) HFD V58 THUMB HTO V139 BRIGS ACY V184 OOD or (110–170, non-turbojet) HFD V58 THUMB HTO V139 BRIGS CEDAR LAKE-STAR	1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300
Wilmington (ILG)	(110–170, non-turbojet) HFD V58 THUMB HTO V139 BRIGS ACY V184 OOD or (110–170, non-turbojet) HFD V58 THUMB HTO V139 BRIGS CEDAR LAKE-STAR	1100–0300 1100–0300 1100–0300

SPECIAL LOW ALTITUDE DIRECTIONAL ROUTES

	Route	Effective Times (UTC)
Low Altitude IFR bi-directional routes for traffic overflying New York Metro Area:		
East of New York Metro Area—V139.....		1100–0300
West of New York Metro Area—V93.....		1100–0300
Low Altitude IFR bi-directional routes for traffic overflying Washington Metro Area:		
.....	HAR V377 MOL	1100–0300
.....	HAR V377 V38 GVE	1100–0300
.....	LRP V93 PXT	1100–0300
Low Altitude IFR single direction route:		
Southbound	MXE V474 V377 HGR	1100–0300
Low Altitude IFR traffic overflying Washington Metro Area from over ENO landing Charlottesville, VA or Shenandoah, VA:		
.....	ENO V213 GVE098 GVE thence direct CHO or SHD	1200–0200

HIGH ALTITUDE**Terminals****ALBANY (ALB)**

	Route	Effective Times (UTC)
Chicago O'Hare (ORD)	SYR J63 EHMAM YXU J547 FNT PAITN-STAR..... (RNAV only) SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)-STAR	1100–0300
Cincinnati (CVG)	or (all others) SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE-STAR	
Washington Dulles (IAD)	(Turbojets) J6 LRP DELRO-STAR	1100–0300
	or (Turboprops) DNY LHY V106 SEG SEG-STAR	1100–0300

ALLENTOWN (ABE)

Cincinnati (CVG)	(RNAV only) ETX SEG PSB MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or (all others) ETX SEG PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	

**Effective
Times
(UTC)**

Terminals	Route	
Detroit Metro-Wayne Co (DTW)	ETX J80 J518 DJB GEMNI-STAR.....	
ATLANTIC CITY (ACY)	V229 LEEAH V268 ENO V29 DQO PENSY J110 LEJOY J518 DJB GEMNI-STAR	
Detroit Metro-Wayne Co (DTW)		
BALTIMORE (BWI) —See Washington/Baltimore Metro		
BANGOR (BGR)		
Cincinnati (CVG)	(RNAV only) SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE-STAR	
BINGHAMTON (BGM)		
Cincinnati (CVG)	(RNAV only) CFB FQM PSB MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) CFB FQM PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
BOSTON (BOS)		
Atlanta (ATL)	GLYDE BAF J77 PTW J48 ODF WHINZ-STAR	1100-0300
	or	
	(RNAV only) GLYDE BAF J77 PTW J48 ODF FLCON (RNAV)-STAR	1100-0300
Baltimore (BWI)	NELIE CMK J75 MXE V378 BAL	1100-0300
Boca Raton (BCT)	(Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR	1100-0300
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR	1100-0300
	or	
	(Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR	1100-0300
	or	
	(Water-Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	1100-0300
Charlotte (CLT)	BOS NELIE CMK J75 GVE LYH SUDSY (RNAV)-STAR	1100-0300
Chicago O'Hare (ORD)	MHT CAM SYR J63 EHMAN YXU J547 FNT PAITN-STAR	1100-0300
Cincinnati (CVG)	(RNAV only) GLYDE CTR HNK J49 PSB MAULL KODIE CTW TIGRR (RNAV)-STAR	1100-0300
	or	
	(all others) GLYDE CTR HNK J49 PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	1100-0300
Cleveland (CLE)	MHT CAM J547 SYR J29 KELIE BDF CXF	1100-0300
Dallas/Ft. Worth (DFW)	GLYDE BAF J77 SAX J6 LIT BYP	1100-0300
Dayton (DAY)	GLYDE BAF J77 SAX J80 AIR APE DANEI-STAR	1100-0300
Denver (DEN)	MHT CAM SYR J547 BUF J94 ONL J114 SNY LANDR-STAR	1100-0300
Detroit Metro-Wayne Co. (DTW)	MHT CAM J547 BUF BUF267 YQ0094 YQ0 SPICA-STAR	1100-0300
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	MHT CAM J547 BUF YQ0	1100-0300
	or	
	SYR J547 YXU GOHMA-STAR	1100-0300
	or	
	SYR J547 YXU SWWAN-STAR	1100-0300

**Effective
Times
(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Fort Lauderdale (FLL)	(Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)-STAR or (Water-Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)-STAR or (Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN GISSH-STAR or (Water-Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH-STAR or (Water-Turboprops-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 ILM AR21 CRANS FISEL (RNAV)-STAR or (Turboprops) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN MLB BLUFI-STAR or (Water-Turboprops) LUCOS SEY067 SEY HTO J174 ILM AR21 CRANS HIILL FATHR GISSH-STAR (WATER-Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Fort Myers (RSW)	NELIE CMK J75 GVE LYH V222 HENBY	1100-0300 0000-2359
Greensboro (GSO)	(Turbojets-GPS or DME/DME-IRU equipped) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX TXMEX (RNAV)-STAR or (non-advanced NAV only) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX DAS-STAR	1100-0300 1100-0300
Houston George Bush Intctl (IAH)	(GPS or DME/DME-IRU equipped) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX ROKIT-STAR	1100-0300
Houston Hobby (HOU)	(non-advanced NAV only) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX DAS-STAR	1100-0300
Indianapolis (IND)	GLYDE BAF J77 SAX J80 EMPTY DQN CLANG- STAR	1100-0300
IIslip (ISP)	LUCOS SEY067 SEY V268 HTO V46 CCC	1100-0300
Kennedy (JFK)	LUCOS SEY067 SEY PARCH CCC ROBER	1100-0300
Los Angeles (LAX)	MHT CAM SYR J547 BUF J16 BAE DBQ J94 ONL J114 DVV J60 HEC DOWNE-STAR or MHT CAM SYR J547 BUF J94 ECK J38 GRB ODI FSD J114 DVV J60 HEC RIIVR-STAR	1100-0300 1100-0300
Memphis (MEM)	GLYDE BAF J77 SAX J6 BWG WLDER-STAR	1100-0300
Miami (MIA)	(Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)-STAR or (Water-Turbojets-GPS or DME/DME-IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)-STAR	1100-0300 1100-0300
	or (Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN ANNEY-STAR	
	or	

**Effective
Times
(UTC)**

Terminals	Route	
	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS..... or	
Milwaukee (MKE)	(Turboprops) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN ANNEY–STAR	
Minneapolis/St Paul (MSP)	MHT CAM SYR J547 BUF J94 ECK MKG V2 SUDDS	1100–0300
Nashville (BNA)	MHT CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU–STAR	1100–0300
Newark (EWR)	GLYDE BAF J77 SAX J6 YOCKY GUITR–STAR	1100–0300
	(More than 250 kts) GLYDE V292 V213 SAX	1100–0300
	or	
	(250 kts or less) GLYDE V292 V489 COATE	1100–0300
New Orleans (MSY)	GLYDE BAF J77 PTW J48 MOL J22 MEI J31	1100–0300
Orlando Exec (ORL)	LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN CORLL–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC APOL ORL.....	1100–0300
	or	
	LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
Philadelphia (PHL)	LUCOS SEY067 SEY HTO J121 BRIGS VCN–STAR	1100–0300
Pittsburgh (PIT)	GLYDE CTR HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Raleigh–Durham (RDU)	LUCOS SEY067 SEY HTO J174 SWL ARGAL–STAR	1000–0300
Salt Lake City (SLC)	MHT CAM SYR J547 BUF J16 BAE DBQ J94 OCS LHO–STAR.....	
San Francisco (SFO)	MHT CAM J547 SYR J547 BUF J94 ECK J38 GRB J106 GEP J70 ABR J32 FMGILA PYE PYE– STAR	1100–0300
St Louis (STL)	GLYDE BAF J77 SAX J80 AIR J110 VHP VLA–STAR NELIE CMK J75 TAY LZARD–STAR.....	
Tampa (TPA)	GLYDE BAF J77 SAX J6 LRP V143 MULRR AML ...	1100–0300
Washington Dulles (IAD)	LUCOS SEY067 SEY HTO J174 ATR085 ATR V308 BILIT	1100–0300
Washington Natl (DCA)	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	1100–0300
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	1100–0300
	or	
	(Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR.....	1100–0300
	or	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals**Route**

(Water-Turbojets) LUCOS SEY067 SEY HTO J174
SWL CEBEE WETRO DIW AR19 AYBID MIMMI
NEUBE SWOMP SANZZ CASKI

1100-0300

BRIDGEPORT (BDR)

Baltimore (BWI)

BILIT

(Turbojets) NEION J223 CORDS CFB

(Turbojets-GPS or DME/DME IRU equipped)

BEADS CCC148 J174 ORF ISO J121 CHS J79

OMN CAYSL (RNAV)-STAR

or

(Turbojets) BEADS CCC148 J174 ORF ISO J121

CHS J79 OMN TUXXI-STAR

or

(Water-Turbojets-GPS or DME/DME IRU

equipped) BEADS CCC148 J174 SWL CEBEE

WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..

or

(Water-Turbojets) BEADS CCC148 J174 SWL

CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE

SWOMP SANZZ CAYSL

(Turbojets) NEION J223 CORDS ULW ULW306

BENE

or

(Turboprops) GAYEL J95 CFB V270 ULW ULW306

BENE

COATE J36 FNT PAITN-STAR

BEADS V139 SARDI RBV J230 J6 LIT BYP

GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR

YQO SPICA-STAR

1100-0300

Buffalo (BUF)

Chicago O'Hare (ORD)

Dallas/Fort Worth (DFW)

Detroit Metro Wayne Co (DTW)

Detroit Satellites:

Coleman A Young (DET), Pontiac (PTK),

Willow Run (YIP), Ann Arbor (ARB)

GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR

YQO

GAYEL J95 CFB CFB286 TRAAD J132 ULW306

KOOPR YQO

(Turbojets) BEADS CCC148 J174 ORF ISO J121

CHS J79 OMN GISSH-STAR

or

(Turboprops) BEADS CCC148 J174 ORF J121

CHS J79 OMN MLB BLIFI-STAR

or

(Turbojets-GPS or DME/DME-IRU equipped)

BEADS CCC148 J174 ORF ISO J121 CHS J79

OMN FISEL (RNAV)-STAR

or

(Water-Turbojets-GPS or DME/DME-IRU

equipped) BEADS CCC148 J174 SWL CEBEE

WETRO ILM AR21 CRANS FISEL (RNAV)-STAR...

or

(Water-Turbojets) BEADS CCC148 J174 SWL

CEBEE WETRO ILM AR21 CRANS HILL FATHR

GISSH-STAR

(Turbojets) NEION J223 CORDS CFB V423

(Turbojets-GPS or DME/DME-IRU equipped)

BEADS CCC148 J174 ORF ISO J121 CHS J79

OMN HILEY (RNAV)-STAR

or

(Turboprops) BEADS CCC148 J174 ORF J121

CHS J79 OMN ANNEY-STAR

or

(Turbojets) BEADS CCC148 J174 ORF ISO J121

CHS J79 OMN ANNEY-STAR

or

Ithaca (ITH)

Miami (MIA, TMB, HST)

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
Montreal (CYUL)	(Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)-STAR... or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Orlando Executive (ORL)	SOARS V419 JUDDS CAM J222 PLB V91 NAPEE BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL-STAR	1100-0300
Orlando Intl (MCO)	or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Orlando Intl (MCO)	BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0300
Orlando Intl (MCO)	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR.....	1100-0300
Pittsburgh (PIT)	or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Raleigh/Durham (RDU)	(Turbojets) COATE J36 J190 SLT GRACE-STAR ... or (Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE-STAR	
Richmond (RIC)	BEADS CCC148 J174 SWL ARGAL-STAR	
Rochester (ROC)	BEADS CCC148 J174 SWL V139 CCV HPW	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE ..	
Tampa (TPA)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	BEADS V139 SARDI RBV J230 J75 TAY LZARD-STAR	
Washington Dulles (IAD)	or (GPS or DME/DME-IRU equipped) BEADS V139 SARDI RBV J230 J75 TAY DADES (RNAV)-STAR.	
Washington Natl (DCA)	BEADS V139 SARDI RBV RBV289 V457 LRP V143 MULRR AML	
West Palm Beach (PBI)	BEADS CCC148 J174 ATR085 ATR V308 BILIT or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)-STAR	
West Palm Beach (PBI)	(Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR.. or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	
West Palm Beach (PBI)	or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR	
West Palm Beach (PBI)	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI.....	
BUFFALO (BUF)		
Cincinnati (CVG)	(RNAV only) BUF JHW MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	

**Effective
Times
(UTC)**

Terminals**Route**

(all others) BUF JHW JHW194 MAULL SLT249
KODIE CTW081 CTW CINCE-STAR

Detroit Satellites:

Coleman A Young (DET), Pontiac (PTK),
Windsor (CYQG), Ann Arbor (ARB),
Willow Run (YIP)

YXU PICES-STAR.....

or

YXU GOHMA-STAR

or

YXU SWWAN-STAR

V33 J70 LVZ LENDY-STAR

(Above 250 kts) V14 GEE RKA HAARP-STAR

or

(250 kts or less) V14 BEEPS J522 EXTOL

RKA292 RKA NOBBI-STAR

(Above 250 kts) V14 BEEPS J522 HNK

SHAFF-STAR

or

(250 kts or less) V14 BEEPS J522 HNK V167

WEARD V489 COATE

V33 BFD PSB HAR V210 BUNTS

Newark (EWR)

Philadelphia (PHL)

BURLINGTON (BTV)

Chicago O'Hare (ORD)

Cincinnati (CVG)

ART YSO J546 ECK TVC PAITN-STAR

(RNAV only) SYR J29 JOSSY MAULL KODIE CTW

TIGRR-STAR

or

(all others) SYR J29 KELIE SLT SLT249 KODIE

CTW081 CTW CINCE-STAR

ALB PWL IGN V157

ALB V213 SAX

(Turbojets only) ALB DNY SLATT-STAR

ALB J49 HNK HNK271 J190 SLT GRACE-STAR ...

(Turbojets) ALB J6 LRP DELRO-STAR

or

(Turboprops) ALB LHY V106 SEG SEG-STAR

1100-0300

La Guardia (LGA)

Newark (EWR)

Philadelphia (PHL)

Pittsburgh (PIT)

Washington Dulles (IAD)

1100-0300

1100-0300

1100-0300

1100-0300

1100-0300

CHARLESTON (CRW)

Cleveland (CLE)

Houston George Bush Intcntl (IAH)

TVT KEATN-STAR

(Turbojets-GPS or DME/DME-IRU equipped) LIT

J180 SWB TXMEX (RNAV)-STAR

or

(non-advanced NAV only) LIT J180 SWB

DAS-STAR

(GPS or DME/DME-IRU equipped) LIT J180 SWB

ROKIT (RNAV)-STAR

or

(non-advanced NAV only) LIT J180 SWB

DAS-STAR

Houston Hobby (HOU)

HNN090/50 GAVNN

or

(RNAV only—at or below FL220) HNN GAVNN

(RNAV)-STAR

or

(all others—at or above FL240) HNN090/50 HNN

JAVIT-STAR

or

(all others—at or below FL220) HNN JAVIT-STAR...

CHARLOTTESVILLE (CHO)

Cincinnati (CVG)

HAR V33 MCMAN J64 MAINE ZANLA WATSN

(RNAV)-STAR

MRB J6 COLNS BRUSH-STAR

or

(RNAV only) MRB J6 COLNS GAVNN (RNAV)-STAR

HARRISBURG (MDT)

Chicago (ORD)

HAR V33 MCMAN J64 MAINE ZANLA WATSN

(RNAV)-STAR

MRB J6 COLNS BRUSH-STAR

or

(RNAV only) MRB J6 COLNS GAVNN (RNAV)-STAR

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
ITHACA (ITH)		
Detroit Satellites:		
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP).....	YXU PICES-STAR..... or YXU GOHMA-STAR	1100-0300
	YXU SWWAN-STAR	1100-0300
LONG ISLAND (Mac Arthur) (ISP)		
Baltimore (BWI)	BEADS EMJAY J174 ZIZZI ATROB5 ATR V308 BILIT	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT).....	(Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR	
	or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR.....	
	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..	
Boston (BOS)	MERIT ORW ORW-STAR	
Buffalo (BUF).....	(Turbojets) NEION J223 CORDS ULW ULW306 BENEE	
	or (Turboprops) GAYEL J95 CFB V270 ULW ULW306 BENEE	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN-STAR	
Cincinnati (CVG).....	(RNAV only) BEADS V139 SARDI RBV J230 SAAME J6 COLNS GAVNN (RNAV)-STAR	1100-0300
	or (all others) BEADS V139 SARDI RBV J230 SAAME J6 COLNS BRUSH-STAR.....	
Dallas/Ft Worth (DFW).....	BEADS V139 SARDI RBV J230 J6 LIT BYP	
Detroit Metro Wayne Co (DTW).....	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR	
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Fort Lauderdale (FLL).....	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN GISSH-STAR.....	
	or (Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN MLB BLIFI-STAR.....	
	or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or (Water-Turboprops) BEADS CCC148 J174 ILM AR21 CRANS HIIILL FATHR GISSH-STAR	
	or (Water-Turboprops-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals**Route**

Fort Myers (RSW)	(Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH-STAR
Ithaca (ITH)	(Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)-STAR... (WATER-Turbojets) BEADS CCC J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR... (Turbojets) NEION J223 CORDS CFB V423
Miami Metro Area:	
Miami (MIA, TMB, HST)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN ANNEY-STAR
	or
	(Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)-STAR... or
	(Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS
	or
	(Turboprops-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO CHS J79 OMN HILEY (RNAV)-STAR.....
	or
	(Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN ANNEY-STAR
Montreal (CYUL).....	GREKI V419 JUDDS CAM J222 PLB PLB-STAR
Orlando Executive (ORL).....	BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL-STAR
	or
	(GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR
Orlando Int'l (MCO)	(Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL.... or
	BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO-STAR
	or
	(GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR.....
	or
	(GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR
Pittsburgh (PIT).....	(Turbojets) COATE J36 J190 SLT GRACE-STAR ... or
	(Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE-STAR
Raleigh/Durham (RDU)	BEADS CCC148 J174 SWL ARGAL-STAR
Richmond (RIC).....	BEADS CCC148 J174 SWL V139 CCV HPW
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE..
Syracuse (SYR).....	(Turbojets) NEION J223 CORDS CFB V29
Tampa TPA.....	BEADS V139 SARDI RBV J230 J75 TAY LZARD-STAR
Washington Dulles (IAD)	BEADS V139 SARDI RBV RVB289 V457 LRP V143 MULRR AML
Washington Natl (DCA)	BEADS CCC148 J174 ATR085 ATR V308 BILIT or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)-STAR.....

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
West Palm Beach (PBI)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR..... or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	
	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI..... or (Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR..	
MANCHESTER (MHT)		
Atlanta (ATL)	(Advanced RNAV only) BAF J77 SAX J77 PTW J48 ODF	1100-0300
	or (Advanced RNAV only) COTEE (RNAV)-DP BAF J77 SAX J77 PTW J48 ODF FLCON (RNAV)-STAR	1100-0300
	or (All others) PSM PSM216/37 COTEE BAF J77 SAX J77 PTW J48 ODF WHINZ-STAR	1100-0300
Baltimore (BWI)	(Advanced RNAV only) COTEE (RNAV)-DP BDL CMK J75 MXE V378 BAL	1100-0300
	or (All others) PSM PSM216/37 COTEE BDL CMK J75 MXE V378 BAL	1100-0300
Chicago O'Hare (ORD)	CAM SYR J63 EHMAM YXU J547 FNT PAITN-STAR	
Cincinnati (CVG).....	(RNAV only) CAM J547 SYR JOSSY MAULL KODIE CTW TIGRR-STAR..... or (all others) CAM J547 SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit Satellites:		
Coleman A Young (DET), Pontiac (PTK), Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP).....	SYR J547 YXU PICES-STAR	
	or SYR J547 YXU GOHMA-STAR	1100-0300
	or SYR J547 YXU SWWAN-STAR	1100-0300
Orlando (MCO).....	(Advanced RNAV only) COTEE (RNAV)-DP BDL CMK J75 CAE J75 DUNKN AMG LESE-STAR.... or (All others) PSM PSM216/37 COTEE BDL CMK J75 CAE J75 DUNKN AMG LESE-STAR	1100-0300
Tampa (TPA).....	(Advanced RNAV only) COTEE (RNAV)-DP BDL CMK J75 TAY DADES (RNAV)-STAR	1100-0300
	or (All others) PSM PSM216/37 COTEE BDL CMK J75 TAY DADES (RNAV)-STAR	1100-0300
Wash Dulles (IAD)	(Advanced RNAV only) COTEE (RNAV)-DP BAF J77 SAX J6 LRP DELRO-STAR	1100-0300
	or (All others) PSM PSM216/37 COTEE BAF J77 SAX J6 LRP DELRO-STAR	1100-0300
Wash Natl (DCA)	(Advanced RNAV only) COTEE (RNAV)-DP BDL CMK J75 MXE V378 BAL	1100-0300
	or (All others) PSM PSM216/37 COTEE BDL CMK J75 MXE V378 BAL	1100-0300
MONTREAL (CYUL)		
Cincinnati (CVG).....	(RNAV only) YOW J546 YSO MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	

**Effective
Times
(UTC)**

Terminals

	Route	
Detroit Metro-Wayne Co (DTW)	(all others) YOW J546 YSO YYZ JHW JHW194	
Kennedy (JFK).....	MAULL SLT249 KODIE CTW081 CTW	
La Guardia (LGA).....	CINCE-STAR.....	
MORRISTOWN (MMU)	YOW J546	
Marco Isle (MKY)	V282 J524 BUGSY J570 ALB IGN IGN-STAR	
Naples (APF)	V282 J524 BUGSY J570 ALB PWL IGN V157	
NEWBURGH (SWF)	(Turbojets-GPS or DME/DME-IRU equipped)	
Cincinnati (CVG).....	WHITE J209 SBY KEMPR ILM AR15 HIBAC	
	SHFTY (RNAV)-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	WHITE J209 SBY KEMPR ILM AR15 HIBAC	
	SHFTY (RNAV)-STAR	
NEW HAVEN (HVN)	(RNAV only) WEARD LHY J36 DGRAF J49 PSB	
Baltimore (BWI)	MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(RNAV only) WEARD LHY J36 DGRAF J49 PSB	
	MMJ CTW TIGRR (RNAV)-STAR	
	or	
	(all others) WEARD LHY J36 DGRAF J49 PSB	
	PSB281 MAULL SLT249 KODIE CTW081 CTW	
	CINCE-STAR	
	BEADS EMJAY J174 ZIZZI ATR085 ATR V308	
Binghamton (BGM)	BILIT	
Boca Raton (BCT).....	(Turbojets) NEION J223 CORDS CFB	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	BEADS CCC148 J174 ORF ISO J121 CHS J79	
	OMN CAYSL (RNAV)-STAR	
	or	
	(Turbojets) BEADS CCC148 J174 ORF ISO J121	
	CHS J79 OMN TUXXI-STAR	
	or	
	(Water-Turbojets) BEADS CCC148 J174 SWL	
	CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE	
	SWOMP SANZZ CAYSL	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) BEADS CCC148 J174 SWL CEBEE	
	WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..	
Buffalo (BUF).....	(Turbojets) NEION J223 CORDS ULW ULW306	
	BENE	
	or	
	(Turboprops) GAYEL J95 CFB V270 ULW ULW306	
	BENE	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN-STAR	1100-0300
Dallas/Ft Worth (DFW).....	BEADS V139 SARDI RBV J230 J6 LIT BYP	
Detroit Metro Wayne Co (DTW).....	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR	
	YQO SPICA-STAR	
Detroit Satellites:		
Coleman A Young (DET), Windsor		
(CYQG), Pontiac (PTK), Willow Run		
(YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR	
	YQO	
Fort Lauderdale (FLL).....	(Water-Turboprops) BEADS CCC148 J174 ILM	
	AR21 CRANS HIILL FATHR GISSH-STAR	
	or	
	(Turbojets) BEADS CCC148 J174 ORF ISO J121	
	CHS J79 OMN GISSH-STAR	
	or	
	(Turboprops) BEADS CCC148 J174 ORF J121	
	CHS J79 OMN MLB BLIFI-STAR	
	or	

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
Ithaca (ITH)	(Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH-STAR or (Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)-STAR... or (Water-Turboprops-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ILM AR21 CRANS FISEL (RNAV)-STAR or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
Miami (MIA).....	(Turbojets) NEION J223 CORDS CFB V423	
	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN ANNEY-STAR	
	or (Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN ANNEY-STAR	
	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)-STAR... SOARS V419 JUDDS CAM J222 PLB PLB-STAR	
Montreal (CYUL).....	(Turbojets) BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL-STAR	1100-0300
Orlando Executive (ORL).....	or (Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL.... or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Orlando Intl (MCO).....	(Turbojets) BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR	1100-0400
	or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Pittsburgh (PIT)	(Turbojets) COATE J36 J190 SLT GRACE-STAR ... or (Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE-STAR	
Raleigh/Durham (RDU)	BEADS CCC148 J174 SWL ARGAL-STAR	
Richmond (RIC).....	BEADS CCC148 J174 SWL V139 CCV HPW	
Rochester (ROC)	GAYEL J95 CFB V252 GIBBE	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	BEADS V139 SARDI RBV J230 J75 TAY LZARD-STAR	
	or (GPS or DME/DME-IRU equipped) BEADS V139 SARDI RBV J230 J75 TAY DADES (RNAV)-STAR.	

**Effective
Times
(UTC)**

Terminals

Terminals	Route
Washington Dulles (IAD).....	BEADS V139 SARDI RBV RBV289 V457 LRP V143 MULRR AML
Washington Natl (DCA).....	BEADS CCC148 J174 ATR085 ATR V308 BILIT or (GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)-STAR.....
West Palm Beach (PBI)	(Water-Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI..... or (Water-Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR.. or (Turbojets-GPS or DME/DME-IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR .. or (Turboprops) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR.....

NEW YORK METRO AREA**From KENNEDY (JFK) only**

Atlanta (ATL)	RBV J230 J48 ODF WHINZ-STAR
	or
	(RNAV only) RBV J230 J48 ODF FLCON RNAV-STAR.....
	or
Augusta (AGS)	RBV J230 J48 ODF WHINZ-STAR
Baltimore (BWI)	RBV J230 J75 GVE J37 SPA
Binghamton (BGM)	RBV RBV274 MXE056 MXE V378 BAL
Boca Raton (BCT).....	(Turbojets) NEION J223 CORDS CFB
	(Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR ..
	or
	(Turboprops) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR.....
	or
	(Water-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL
	or
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 BENE
	or
	(Turboprops) GAYEL J95 CFB V270 ULW ULW306 BENE
	GREKI V419 JUDDS CAM
Burlington (BTV).....	WAVEY EMJAY J174 SWL J121
Charleston (CHS)	RBV J230 J75 GVE LYH MAJIC-STAR
Charlotte (CLT)	RBV J230 J75 GVE
Charlottesville (CHO)	RBV J64 FWA GSH-STAR
Chicago Midway (MDW).....	COATE J36 FNT PAITN-STAR
Chicago O'Hare (ORD)	(RNAV only) RBV J230 SAAME J6 COLNS GAVNN (RNAV)-STAR
Cincinnati (CVG).....	or (all others) RBV J230 SAAME J6 COLNS BRUSH-STAR
	RBV J64 PSB115 PSB PSB292 YNG CXR.....
Cleveland (CLE)	RBV J230 J75
Columbia (CAE).....	RBV J230 AIR AIR260 BREMN
Columbus (CMH).....	.....

1100-0300

0000-2359

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
Dallas/Ft. Worth (DFW)	RBV J230 J6 LIT BYP	
Dayton (DAY)	RBV J230 AIR APE DANEI-STAR	
Denver (DEN)	RBV J230 AIR APE J178 FWA JOT J60 IOW J10 LBF SAYGE-STAR	
Detroit Metro-Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR	
Detroit Satellites: (DET), Windsor	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
(CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG	
Fayetteville (FAY)	RBV J230 J75 GVE SBV RDU	
Ft Lauderdale (FLL, FXE, OPF)	(Water-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS HILL FATHR GISSH-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)-STAR ...	
	or	
	(Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN GISSH-STAR	
	or	
	(Turbobots-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or	
	(Turboprops) WAVEY EMJAY J174 ORF J121 CHS J79 OMN MLB BLUFI-STAR	
	or	
	(Water-Turboprops) WAVEY EMJAY J174 ILM AR21 CRANS HILL FATHR GISSH-STAR	
	or	
	(Water-Turboprops-GPS OR DME/DME-IRU equipped) WAVEY EMJAY J174 ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	
	(WATER-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Fort Myers (FMY, RSW)	RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
	or	
	(WATER-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Greensboro (GSO)	RBV J230 J75 GVE LYH V222 HENBY	0000-2359
Houston George Bush Intcntl (IAH)	(non-advanced NAV only) RBV J230 J48 MOL J22 VUZ AEX DAS-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) RBV J230 J48 MOL J22 VUZ AEX TXMEX (RNAV)-STAR	
	or	
	(non-advanced NAV only) RBV J230 J48 MOL J22 VUZ AEX DAS-STAR	
	or	
	(GPS or DME/DME-IRU equipped) RBV J230 J48 MOL J22 VUZ AEX ROKIT-STAR	
Houston Hobby (HOU)	RBV J230 AIR J80 EMPTY DQN CLANG-STAR	
	(Turbojets) NEION J223 CORDS CFB V423	
	WAVEY EMJAY J174 CHS BRUNSWICK-STAR	
	RBV J230 AIR J80 SPI BRAYMER-STAR	
	RBV J230 J48 MOL J22	
	RBV J230 AIR J80 MCI J24 SLN J102 ALS J44 RSK	
Indianapolis (IND)	RBV J230 J6 HVQ J6 YOCKY DARBY-STAR	
Ithaca (ITH)	(GPS or DME/DME-IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
Jacksonville (JAX)	RBV J230 J6 BWG WLDER-STAR	
Kansas City (MKC)		
Knoxville (TYS)		
Los Angeles (LAX)		
Louisville (SDF)		
Marco Island (MKY)		
Memphis (MEM)		

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)-STAR or (Water-Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)-STAR... or (Water-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS or (Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN ANNEY-STAR	
Milwaukee (MKE)	(Turboprops) WAVEY EMJAY J174 ORF J121 CHS J79 ANNEY-STAR	
Minneapolis (MSP)	COATE J36 FNT MKG V2 SUDDS	
Montreal (CYUL)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
Naples (APF)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR (Turbojets-GPS or DME/DME-IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)-STAR.....	
Nashville (BNA)	RBV J230 J6 YOCKY GUITR- STAR	
New Orleans (MSY)	RBV J230 J48 MOL J22 MEI J31	
Norfolk (ORF)	WAVEY EMJAY J174 SWL V139 CCV	
Orlando Executive (ORL)	(Turbojets) WAVEY EMJAY J174 ORF J121 CHS J79 OMN CORLL-STAR	1100-0300
Orlando Int'l (MCO)	or (GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR.....	1100-0400
Phoenix (PHX)	(Turbojets) WAVEY EMJAY J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0300
Pittsburgh (PIT)	(Water-Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL..... or (GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR.....	1100-0400
Raleigh/Durham (RDU)	(GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR.....	1100-0400
Richmond (RIC)	RBV J230 AIR J110 STL J19 ZUN FOSSL-STAR	
Roanoke (ROA)	(Turbojets) COATE J36 J190 SLT GRACE-STAR ... or (Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE-STAR	
Rochester (ROC)	WAVEY EMJAY J174 SWL ARGAL-STAR	
Salt Lake City (SLC)	WAVEY EMJAY J174 SWL V139 CCV HPW	
San Francisco (SFO)	RBV J230 J48 MOL	
Sarasota/Bradenton (SRQ)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE . GAYEL J95 BUF J16 BAE DBQ J94 OCS OGD..... GAYEL J95 BUF J16 ECK J38 GRB J106 GEP J70 ABR J32 FMG GOLDEN GATE-STAR	
Savannah (SAV)	RBV J230 J75 TAY J85 GNV LAL	
St. Louis (STL)	WAVEY EMJAY J174 ORF J121 CHS	
St. Petersburg (PIE)	RBV J230 AIR J110 VHP VLA-STAR	
Syracuse (SYR)	RBV J230 J75 TAY LZARD-STAR	
Tampa (TPA)	(Turbojets) NEION J223 CORDS CFB V29	
	RBV J230 J75 TAY LZARD-STAR	
	or	

PREFERRED IFR ROUTES

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**Effective
Times
(UTC)**

Terminals

Toronto (CYYZ)

Washington Dulles (IAD)

Washington Nati (DCA)

West Palm Beach (PBI)

From LA GUARDIA (LGA) only

Akron/Canton (CAK)

Allegheny County (AGC)

Atlanta (ATL)

Augusta (AGS)

Baltimore (BWI)

Binghamton (BGM)

Birmingham (BHM)

Boca Raton (BCT)

Boston (BOS)

Buffalo (BUF)

Burlington (BTV)

Charleston (CHS)

Charleston (CRW)

Charlotte (CLT)

Charlottesville (CHO)

Chattanooga (CHA)

Chicago Midway (MDW)

Chicago O'Hare (ORD)

Cincinnati (CVG)

Route	Effective Times (UTC)
(GPS or DME/DME-IRU equipped) RBV J230 J75	
TAY DADES (RNAV)-STAR	
GAYEL J95 BUF V36	
RBV RBV289 V457 LRP V143 MULRR AML	
(Turbojets only FL 180-FL 220) WAVEY EMJAY	
J174 ZIZZI ATR085 ATR V308 BILIT DCA	
or	
(Turbojets only/FL180-FL220/GPS or	
DME/DME-IRU equipped) WAVEY EMJAY J174	
ZIZZI ATR085 ATR V308 LAFLN BILIT	
(RNAV)-STAR.....	
(Water-Turbojets-GPS or DME/DME-IRU	
equipped) WAVEY EMJAY J174 SWL CEBEE	
WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR..	
or	
(Turbojets) WAVEY EMJAY J174 ORF ISO J121	
CHS J79 OMN TUXXI-STAR.....	
or	
(Turbojets-GPS or DME/DME-IRU equipped)	
WAVEY EMJAY J174 ORF ISO J121 CHS J79	
OMN FRWAY (RNAV)-STAR	
or	
(Water-Turbojets) WAVEY EMJAY J174 SWL	
CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE	
SWOMP SANZZ CASKI.....	
ELIOT J60 PSB PSB292060 YNG V72 ACO	
ELIOT J80 VINSE NESTO-STAR	
LANNA J48 ODF WHINZ-STAR	
or	
(RNAV only) LANNA J48 ODF FLCON (RNAV)-STAR	
BIGGY J75 GVE J37 SPA	
BIGGY J75 MXE V378 BAL	
(Turbojets) NEION J223 CORDS CFB	
LANNA J48 MOL J22 VXV VUZ	
(Turbojets) WHITE J209 SBY J79 KATZN ISO J121	
CHS J79 OMN TUXXI-STAR.....	
or	
(Turbojets-GPS or DME/DME-IRU equipped)	
WHITE J209 SBY J79 KATZN ISO J121 CHS J79	
OMN CAYSL (RNAV)-STAR	
or	
(Water-Turbojets) WAVEY EMJAY J174 SWL	
CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE	
SWOMP SANZZ CAYSL	
or	
(Water-Turbojets-GPS or DME/DME-IRU	
equipped) WAVEY EMJAY J174 SWL CEBEE	
WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..	
MERIT ORW ORW-STAR	
(Turbojets) NEION J223 CORDS ULW ULW306	
BENE	
or	
(Turboprops) COATE J36 ULW141 ULW ULW306	
BENE	
GREKI V419 JUDDS CAM	
(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	
PARKE J6 HVQ	
BIGGY J75 GVE LYH MAJIC-STAR	
BIGGY J75 GVE	
LANNA J48 MOL J22 VXV	
ELIOT J60 GSH GSH-STAR	
COATE J36 FNT PAITN-STAR	
(RNAV only) PARKE J6 COLNS GAVNN	
(RNAV)-STAR	
or	

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PREFERRED IFR ROUTES

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Terminals**Route**

Cleveland (CLE)	(all others) PARKE J6 COLNS BRUSH-STAR
Columbus (CMH).....	ELIOT J60 PSB PSB292 YNG CXR
Dallas/Fort Worth (DFW)	ELIOT J80 AIR AIR260 BREMN
Dayton (DAY)	PARKE J6 LIT BYP
Daytona Beach (DAB)	ELIOT J80 AIR APE DANEI-STAR
	WHITE J209 SBY J79 KATZN J193 J121 CHS J79
	OMN
Dekalb/Peachtree (PDK)	LANNA J48 ODF AWSON-STAR
Denver (DEN).....	ELIOT J60 IOW J10 LBF SAYGE-STAR
Detroit Metro Wayne Co (DTW).....	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR
Detroit Satellites:	
Ann Arbor (ARB), Coleman A Young (DET), Pontiac (PTK), Willow Run (YIP), Windsor (CYQG).....	
Windsor (CYQG)	GAYEL J95 BUF J547 YXU PICES-STAR
	or
	GAYEL J95 BUF J547 YXU GOHMA-STAR
	or
	GAYEL J95 BUF J547 YXU SWWAN-STAR
	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU
Fort Lauderdale (FLL, FXE, OPF)	(Water-Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR
	or
	(Water-Turbojets GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR
	or
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH-STAR.....
	or
	(Turboprops-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS OMN FISEL (RNAV)-STAR
	or
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 VRB BLIFI-STAR.....
	or
	(Water-Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR
	or
	(Water-Turboprops GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR
	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR
	or
Fort Myers (FMY, RSW)	(WATER-Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CESEE WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR...
	ELIOT J80 SUZIE J64
	BIGGY J75 GVE LYH V222 HENBY
	BIGGY J75 GVE J37 SPA
	LANNA J48 EMI CSN V140 MOL
	(non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR
	or
	(Turboprops-GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)-STAR
	(GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)-STAR
	or
Houston Hobby (HOU).....	(non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR

1100-0300
1100-0300
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PREFERRED IFR ROUTES

**Effective
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Terminals	Route	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX).....	(Turbojets) WHITE J209 SBY J79 CHS SSI-STAR	
Kansas City (MKC).....	ELIOT J80 SPI BQS-STAR	
Knoxville (TYS).....	LANNA J48 MOL J22	
Lewisburg (LWB)	LANNA J48 EM1 CSN V140 MOL	
Lexington (LEX).....	PARKE J6 HVQ	
Louisville (SDF).....	PARKE J6 HVQ J6 YOCKY DARBY-STAR	
Marco Island (MKY).....	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Memphis (MEM).....	PARKE J6 BWG WLDER-STAR	
Miami (MIA, TMB, HST).....	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)-STAR	
	or	
	(Turbojets-GPS or DME-DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY-STAR	
	COATE J36 FNT MKG V2 SUDDS	
	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
	BIGGY J75 GVE J37	
	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
	PARKE J6 YOCKY GUITR- STAR	
	LANNA J48 MOL J22 MEI J31	
	WHITE J209 SBY V1 CCV	
	ELIOT J60 IOW DSM	
	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
	(Water-Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOL0 ORL	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR	1100-0400
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
	ELIOT J80 VINSE NESTO-STAR	
	GREKI V419 JUDDS CAM CON CON067 PARSO ...	
Orlando Intl (MCO)		
Phoenix (PHX).....		
Pittsburgh (PIT).....		
Portland (PWM).....		

**Effective
Times
(UTC)**

Terminals

	Route	
Raleigh/Durham (RDU)	WHITE J209 CYN J37 J191 PXT PXT238 HPW025 HPW ARGAL-STAR	
Richmond (RIC).....	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE .. or (Turboprops) COATE J36 LHY CFB V252 GIBBE ... GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82	
Salt Lake City (SLC)	RAP J158 DDY J107 OCS OGD	
Sarasota/Bradenton (SRQ)	BIGGY J75 TAY J85 GNV LAL	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
St. Louis (STL)	ELIOT J80 AIR J110 VHP VLA-STAR	
St. Petersburg (PIE)	BIGGY J75 TAY LZARD-STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29 .. or (Turboprops) COATE J36 LHY CFB	
Tampa (TPA)	BIGGY J75 TAY LZARD-STAR	
Toledo (TOL).....	ELIOT J60 DJB VWV	
Toronto (CYYZ).....	(Turbojets) GAYEL J95 BUF V36 .. or (Turboprops) COATE J36 ULW141 ULW V36	
Tri-City (TRI).....	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD).....	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA).....	BIGGY J75 MXE V378 BAL .. or (GPS or DME/DME-IRU equipped) BIGGY J75 MXE CLIPR (RNAV)-STAR	
West Palm Beach (PBI)	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)-STAR .. or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
Winston-Salem (INT)	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR	
Youngstown (YNG).....	or (Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR .. BIGGY J75 GSO .. ELIOT J60 PSB PSB292060 ..	
From NEWARK (EWR) only		
Akron (CAK).....	ELIOT J60 PSB PSB292 YNG V72 ACO	
Akron (AKR)	ELIOT J60 PSB PSB292060 YNG V72 ACO	
Allegheny County (AGC)	ELIOT J80 VINSE NESTO-STAR	
Atlanta (ATL)	LANNA J48 ODF WHINZ-STAR .. or (RNAV only) LANNA J48 ODF FALCON (RNAV)-STAR	
Augusta (AGS)	BIGGY J75 GVE J37 SPA	1100-0300
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	NEION J223 CORDS CFB	
Birmingham (BHM)	LANNA J48 MOL J22 VXV VUZ	
Boca Raton (BCT).....	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR .. or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR .. or (Water-Turbojets GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID CAYSL (RNAV)-STAR	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
Buffalo (BUF)	or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Charleston (CHS)	(Turbojets) NEION J223 CORDS ULW ULW306 BENE	
Charleston (CRW)	or (Turboprops) COATE J36 ULW141 ULW ULW306 BENE	
Charlotte (CLT)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS .	
Charlottesville (CHO)	PARKE J6 HVQ	1100- 0300
Chattanooga (CHA)	BIGGY J75 GVE LYH MAJIC-STAR	
Chicago Midway (MDW)	BIGGY J75 GVE	
Chicago O'Hare (ORD)	LANNA J48 MOL J22 VXV	
Cincinnati (CVG)	ELIOT J60 GSH GSH-STAR	0000-2359
	COATE J36 FNT PAITN-STAR	
	PARKE J6 COLNS HNN JAVIT-STAR	
	or COLNS JAVIT-STAR	
	or (RNAV only) PARKE J6 COLNS GAVNN (RNAV)-STAR	
	or (all others) PARKE J6 COLNS BRUSH-STAR	
Cleveland (CLE)	ELIOT J60 PSB PSB292 YNG CXR	
Columbus (CMH)	ELIOT J80 AIR AIR260 BREMN	
Dallas/Fort Worth (DFW)	PARKE J6 LIT BYP	
Dayton (DAY)	ELIOT J80 AIR APE DANEI-STAR	
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Dekalb (Peachtree) (PDK)	LANNA J48 ODF AWSON-STAR	
Denver (DEN)	ELIOT J60 IOW J10 LBF SAYGE-STAR	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR	
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPER YQG	
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU	
Fort Lauderdale (FLL)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	
	or (Water-Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or (Water-Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH-STAR	
	or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLIFI-STAR	
	or (Water-Turboprops-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	

**Effective
Times
(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Fort Myers (FMY, RSW)	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	0000-2359
Greensboro (GSO)	BIGGY J75 GVE LYH V222 HENBY	
Greer (GSP)	BIGGY J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intcntl (IAH)	(non-advanced NAV only) LANNA J48 MOL J22 MEI AEX DAS-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 MEI AEX TXMEX (RNAV)-STAR	
Houston Hobby (HOU)	(GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 MEI AEX ROKIT (RNAV)-STAR	
	or	
	(non-advanced NAV only) LANNA J48 MOL J22 MEI AEX DAS-STAR	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Kansas City (MKC)	ELIOT J80 SPI BQS-STAR	
Knoxville (TYS)	LANNA J48 MOL J22	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Los Angeles (LAX)	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 PGS RIIVR-STAR	
Louisville (LOU, SDF)	PARKE J6 HVQ J6 YOCKY DARBY-STAR	
Marco Island (MKY)	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Memphis (MEM)	PARKE LRP J6 BWG WLDER-STAR	
Miami (MIA)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY-STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU- STAR	
Mobile (MOB)	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
Montgomery (MGM)	BIGGY J75 GVE J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
Naples (APF)	(Turbojets-GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR- STAR	
New Orleans (MSY)	LANNA J48 MOL J22 MEI J31	
Norfolk (ORF)	WHITE J209 SBY V1 CCV	
Orlando Executive (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR or (Water-Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOL0 ORL or (GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR..... or (GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR.....	1100-0300 1100-0300 1100-0400 1100-0400
Phoenix (PHX).....	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	1100-0400
Pittsburgh (PIT).....	ELIOT J80 VINSE NESTO-STAR	
Portland (PWM).....	GREKI V419 JUDDS CAM CON CON067 PARSO ...	
Raleigh-Durham (RDU)	WHITE J209 CYN J37 J191 PXT PXT238 HPW025 HPW ARGAL-STAR	
Richmond (RIC).....	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNIA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE . or (Turboprops) COATE J36 LHY CFB V252 GIBBE ... GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82 RAP J158 DDY J107 OCS OGD.....	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J38 GRB J106 GEP J70 ABR J32 FMA ILA PYE GOLDEN GATE-STAR BIGGY J75 TAY J85 GNV LAL	
San Francisco (SFO).....	(Turbojets) WHITE J209 SBY J79 CHS	
Sarasota/Bradenton (SRQ)	ELIOT J80 AIR J110 VHP VLA-STAR	
Savannah (SAV)	BIGGY J75 TAY LZARD-STAR	
St. Louis (STL).....	(Turbojets) NEION J223 CORDS CFB V29	
St. Petersburg (PIE).....	or COATE J36 LHY CFB	
Syracuse (SYR).....	BIGGY J75 TAY LZARD-STAR	
Tampa (TPA).....	or (GPS or DME/DME-IRU equipped) BIGGY J75 TAY DADES (RNAV)-STAR	
Toledo (TOL).....	ELIOT J60 DJB VVV	
Toronto (CYYZ)	(Turbojets) GAYEL J95 BUF V36	
Tri-City (TRI)	or (Turboprops) COATE J36 ULW141 ULW V36	
Washington Dulles (IAD)	LANNIA J48 MOL J22 PSK V16 HMV	
Washington Natl (DCA)	PARKE J6 LRP V143 MULRR AML	
West Palm Beach (PBI)	BIGGY J75 MXE V378 BAL	
	or (GPS or DME/DME-IRU equipped) BIGGY J75 MXE CLIPR (RNAV)-STAR.....	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)-STAR.....	
	or (Turbojets-GSP or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR.....	
	or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID NEUBE SWOMP SANZZ CASKI	
Winston Salem (INT).....	BIGGY J75 GSO	
Youngstown (YNG).....	ELIOT J60 PSB PSB292	
From NEWARK SATELLITES only	ELIOT J60 PSB PSB292 YNG V72 ACO	
Akron (CAK).....		

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Terminals	Route	(UTC)
Akron (AKR)	ELIOT J60 PSB PSB292060 YNG V72 ACO	
Allegheny County (AGC).....	ELIOT J80 VINSE NESTO-STAR	
Augusta (AGS)	LANNA J48 ETX215 J75 GVE J37 SPA	
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Birmingham (BHM)	LANNA J48 MOL J22 XVX VUZ	
Boca Raton (BCT).....	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID CAYSL (RNAV)-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	(Turbojets) NEION J223 CORDS ULW ULW306 BENE	
	or	
Buffalo (BUF).....	(Turboprops) COATE J36 ULW141 ULW ULW306 BENE	
	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS .	
Charleston (CHS)	PARK J6 HVQ	
Charleston (CRW).....	LANNA J48 ETX215 J75 GVE LYH MAJIC-STAR	
Charlotte (CLT)	LANNA J48 ETX215 J75 GVE	
Charlottesville (CHO)	LANNA J48 MOL J22 XVX	
Chattanooga (CHA).....	COATE J36 FNT PAINT-STAR	
Chicago O'Hare (ORD)	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)-STAR	
	or	
Cincinnati (CVG).....	(all others) PARKE J6 COLNS BRUSH-STAR	
	ELIOT J80 AIR AIR260 BREMN	
	PARK J6 LIT BYP	
	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Columbus (CMH).....	LANNA J48 ODF AWSON-STAR	
Dallas/Fort Worth (DFW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR	
Daytona Beach (DAB)		
Dekalb (Peachtree) (PDK).....	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Detroit Metro Wayne Co (DTW).....	LANNA J48 ETX215 J75 GVE SBV RDU	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or	
Detroit Satellites:	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB).....	or	
Fayetteville (FAY)	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH-STAR	
Fort Lauderdale (FLL).....	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or	
	(Water-Turboprops-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	

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Terminals	Route	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI-STAR..... or (Water-Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR (GISSH)-STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME-IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)-STAR	
	or (WATER-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR.....	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	0000-2359
Greensboro (GSO)	LANNA J48 ETX215 J75 GVE LYH V222 HENBY ...	
Greer (GSP)	LANNA J48 ETX215 J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intcntl (IAH)	(non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)-STAR.....	
Houston Hobby (HOU)	(GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)-STAR	
	or (non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS SSI-STAR.....	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Los Angeles (LAX)	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 CIVET CIVET-STAR	
Louisville (LOU, SDF)	PARKE J6 HVQ J6 YOCKY DARBY-STAR	
Marco Island (MKY)	(GPS or DME/DME-IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)-STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Miami (MIA)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY-STAR	
	or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY-STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
Mobile (MOB)	LANNA J48 J53 SPA J37 MGM MVC V20 AXIS ..	
Montgomery (MGM)	LANNA J48 J53 SPA J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB V91 NAPEE ..	
Naples (APF)	(Turbojets-GPS or DME/DME-IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)-STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR-STAR	

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Terminals	Route	
Norfolk (ORF).....	WHITE J209 SBY V1 CCV	
Orlando Executive (ORL).....	(Turbojets) WHITE J209 SBY J79 KATZN J193	1100-0300
Orlando Intl (MCO)	J121 CHS J79 OMN CORLL-STAR	
	(Turbojets) WHITE J209 SBY J79 KATZN J193	
	J121 CHS J79 OMN BITHO-STAR	1100-0300
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR ILM	
	AR15 HIBAC APOL0 ORL	1100-0300
Phoenix (PHX).....	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
Portland (PWM).....	GREKI V419 JUDDS CAM CON CON067 PARSO ...	
Richmond (RIC).....	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE .	
	or	
	(Turboprops) COATE J36 LHY CFB V252 GIBBE ...	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82	
	RAP J158 DDY J107 OCS OGD	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS.....	
St. Petersburg (PIE).....	LANNA J48 J53 SPA J85 TAY LZARD-STAR	
Syracuse (SYR).....	(Turbojets) NEION J223 CORDS CFB V29	
	or	
Tampa (TPA).....	(Turboprops) COATE J36 LHY CFB	
	LANNA J48 J53 SPA J85 TAY LZARD-STAR	
	or	
Toledo (TOL).....	(GPS or DME/DME-IRU equipped) LANNA J48 J53	
Toronto (CYYZ)	SPA J85 TAY DADES (RNAV)-STAR	
	ELIOT J60 DJB WV	
Tri-City (TRI)	(Turbojets) GAYEL J95 BUF V36	
Washington Dulles (IAD)	or	
Washington Natl (DCA)	(Turboprops) COATE J36 ULW141 ULW V36	
West Palm Beach (PBI)	LANNA J48 MOL J22 PSK V16 HMV	
	PARKE J6 LRP V143 MULRR AML	
	BIGGY J75 MXE V378 BAL	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	WHITE J209 SBY J79 KATZN ISO J121 CHS J79	
	OMN FRWAY-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) WHITE J209 SBY KEMPR DIW AR19	
	AYBID FRWAY (RNAV)-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121	
	CHS J79 OMN TUXXI-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW	
	AR19 AYBID MIMMI NEUBE SWOMP SANZZ	
	CASKI	
Winston Salem (INT).....	BIGGY J75 GSO	
Youngstown (YNG).....	ELIOT J60 PSB PSB292060	
FROM TETERBORO (TEB) only		
Boca Raton (BCT).....	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) WHITE J209 SBY KEMPR DIW AR19	
	AYBID CAYSL (RNAV)-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW	
	AR19 AYBID MIMMI NEUBE SWOMP SANZZ	
	CAYSL	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	WHITE J209 SBY J79 KATZN ISO J121 CHS J79	
	OMN CAYSL (RNAV)-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121	
	CHS J79 OMN TUXXI-STAR	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS .	

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Terminals	Route	
Cincinnati (CVG).....	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)-STAR..... or (all others) PARKE J6 COLNS BRUSH-STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP).....	GAYEL J95 BUF J547 YXU PICES-STAR	
	or GAYEL J95 BUF J547 YXU GOHMA-STAR	1100-0300
	or GAYEL J95 BUF J547 YXU SWWAN-STAR	1100-0300
	or ELIOT J60 PSB LLEEO-STAR	
Ft. Lauderdale (FLL, OPF)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH-STAR.....	
	or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLIFI-STAR.....	
	or (Water-Turboprops) WHITE J209 ORF J174 ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or (Water-Turboprops-GPS or DME/DME-IRU equipped) WHITE J209 ORF J174 ILM AR21 CRANS FISEL (RNAV)-STAR	
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	
	or (Water-Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS FATHR GISSH-STAR	
Jacksonville (JAX).....	(Turbojets) WHITE J209 SBY J79 CHS SSI-STAR ..	
Marco Isle (MKY)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Miami (MIA, TMB, HST).....	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)-STAR.....	
	or (Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY-STAR	
	or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY-STAR	
Naples (APF)	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
	or	1100-0300

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Terminals**Route**

Orlando/Exec (ORL).....	(GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR..... or (GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR..... (Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	1100-0400
West Palm Beach (PBI)	(Water-Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	1100-0300
Savannah (SAV)	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
West Palm Beach (PBI)	(Turbojets) WHITE J209 SBY J79 CHS..... (Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR..... or (Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)-STAR..... or (Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI.....	

FROM WHITE PLAINS (HPN)

Allegheny (AGC)	ELIOT J80 VINSE NESTO-STAR
Atlanta (ATL)	LANNA J48 ODF WHINZ-STAR
	or (RNAV only) LANNA J48 ODF FLCON (RNAV)-STAR
Baltimore (BWI)	BIGGY J75 MXE V378 BAL.....
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB
Boca Raton (BCT).....	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CAYSL (RNAV)-STAR
	or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR..... or (Water-Turbojets-GPS or DME/DME-IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR ..
	or (Water) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL
Boston (BOS)	MERIT ORW ORW-STAR
Buffalo (BUF).....	(Turbojets) NEION J223 CORDS ULW ULW306 BENE
	or (Turboprops) GAYEL J95 CFB V270 ULW306 BENE
Burlington (BTV).....	GREKI V419 JUDDS CAM.....
Charleston (CHS).....	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS .
Charleston (CRW).....	PARKE J6 HVQ
Charlotte (CLT)	BIGGY J75 GVE LYH MAJIC-STAR
Chicago Midway (MDW).....	ELIOT J60 GSH GSH-STAR
Chicago O'Hare (ORD)	COATE J36 FNT PAITN-STAR

0000-2359

PREFERRED IFR ROUTES

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Terminals	Route
Cincinnati (CVG).....	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)-STAR..... or (all others) PARKE J6 COLNS BRUSH-STAR
Cleveland (CLE)	ELIOT J60 PSB PSB292 YNG CXR.....
Columbus (CMH).....	ELIOT J80 AIR AIR260 BREMN
Dallas/Ft Worth (DFW).....	PARKE J6 LIT BYP
Dayton (DAY)	ELIOT J80 AIR APE DANEI-STAR
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN.....
Denver (DEN).....	ELIOT J60 IOW J10 LBF SAYGE-STAR
Detroit Metro-Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA-STAR
Detroit Satellites:	
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU
Fort Lauderdale (FLL, FXE, OPF)	(Turbojets-All Others) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH-STAR.... or (Turbojets)-/E,/G,/R,/J,/L,/Q equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)-STAR
Fort Myers (FMY, RSW)	or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLIFI-STAR.....
Fort Wayne (FWA).....	or (Water-Turboprops-/E,/G,/R,/J,/L,/Q equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR
Greensboro (GSO).....	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR
Greer (GSP).....	ELIOT J80 SUZIE J64
Hot Springs (HSP)	BIGGY J75.....
Houston George Bush Intntl (IAH)	BIGGY J75 GVE J37 SPA
Houston Hobby (HOU).....	LANNA J48 EMI CSN V140 MOL
Indianapolis (IND)	(non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR
Ithaca (ITH)	or (Turbojets-GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)-STAR
Jacksonville (JAX).....	(GPS or DME/DME-IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)-STAR
Lewisburg (LWB)	or (non-advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS-STAR
Lexington (LEX).....	ELIOT J80 EMPTY DQN CLANG-STAR
Los Angeles (LAX)	(Turbojets) NEION J223 CORDS CFB V423.....
Louisville (SDF).....	(Turbojets) WHITE J209 SBY J79 CHS SSI-STAR ..
Marco Island (MKY).....	LANNA J48 EMI CSN V140 MOL
Melbourne (MLB)	PARKE J6 HVQ
Memphis (MEM).....	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 PGS RIIVR-STAR
	PARKE J6 HVQ J6 YOCKY DARBY-STAR.....
	(GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR
	or (Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)-STAR
	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR
	PARKE J6 BWG WLDER-STAR

**Effective
Times
(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	COATE J36 FNT MKG V2 SUDDS	
	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
	BIGGY J75 GVE J37	
	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)-STAR	
	PARKE J6 YOCKY GUITR-STAR	
	WHITE J209 SBY V1 CCV	
	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	
	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	
	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
	GREKI V419 JUDDS CAM CON CON067 PARSO	
	WHITE J209 SBY V1 CCV HPW	
	(Turbojets) NEION J223 CORDS ULW V31 GIBBE ..	
	GAYEL J95 BUF J16 ECK J16 BAE DBQ J94 OCS OGD	
	(Turbojets) WHITE J209 SBY J79 CHS	
	ELIOT J80 AIR J110 VHP VLA-STAR	
	BIGGY J75 TAY LZARD-STAR	
	(Turbojets) NEION J223 CORDS CFB V29	
	BIGGY J75 TAY LZARD-STAR	
	or	
	(GPS or DME/DME-IRU equipped) BIGGY J75 TAY DADES (RNAV)-STAR	
	ELIOT J60 DJB VWV	
Toledo (TOL)		

PREFERRED IFR ROUTES

**Effective
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Terminals	Route	
Toronto (CYYZ)	GAYEL J95 BUF V36	
Tri City (TRI)	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD)	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA)	BIGGY J75 MXE V378 BAL	
	or	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped) BIGGY J75 MXE CLIPR (RNAV)-STAR	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY-STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR	
	or	
	(Water-Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
Winston/Salem (INT)	BIGGY J75 GSO	
Youngstown (YNG).....	ELIOT J60 PSB PSB292060	
NORFOLK (ORF)		
Chicago O'Hare (ORD)	MOL GEFFS J149 FWA KNOX-STAR	
	or	
Cincinnati (CVG).....	MOL GEFFS J149 ROD WATSN (RNAV)-STAR	
	(at or above FL240) WAIKS ORF290 KELLE MOL130 MOL HNN090/50 HNN BRUSH-STAR	
	or	
	(at or below FL220) WAIKS ORF290 KELLE MOL130 MOL HNN BRUSH-STAR	
	or	
	(RNAV only-at or above FL240) WAIKS KELLE MOL HNN090/50 HNN GAVNN (RNAV)-STAR	
	or	
	(RNAV only-at or below FL220) WAIKS KELLE MOL HNN GAVNN (RNAV)-STAR	
Detroit Metro Wayne Co (DTW).....	WAIKS ORF290 KELLE MOL130 MOL GEMNI-STAR	
Houston George Bush Intcntl (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) VUZ AEX TXMEX (RNAV)-STAR	
	or	
Houston Hobby (HOU).....	(non-advanced NAV only) VUZ AEX DAS-STAR	
	(GPS or DME/DME-IRU equipped) VUZ AEX ROKIT (RNAV)-STAR	
	or	
IIslip (ISP).....	(non-advanced NAV only) VUZ AEX DAS-STAR	
Kennedy (JFK).....	SCHOL SBY200 J121 SARDI CCC	1100-0400
La Guardia (LGA).....	SCHOL SBY 200 J121 SIE CAMRN-STAR	1100-0400
Newark (EWR).....	HPW V213 PXT KORRY-STAR	1100-0300
	HPW HPW025 J14 PXT DYLIN-STAR	
	or	
	(GPS or DME/DME-IRU equipped) HPW HPW025 J14 PXT PHLBO (RNAV)-STAR	
Philadelphia (PHL).....	SCHOL SBY200 V139 RADDS VCN-STAR	1100-0400
Teterboro (TEB).....	HPW V213 PXT JAIKE-STAR	1100-0300
	or	
	(non advanced navigation, turbojets only) WAIKS ORF290079 FAK BRV AML J227 J49 J70 LVZ LVZ-STAR	
	1100-0300	
PHILADELPHIA METRO AREA (PHL, PNE)		
Albany (ALB).....	DITCH J225 JFK244016 LGA LGA055 V487 CANAN V130	
Atlanta (ATL)	MXE MXE278 PENSY J48 ODF WHINZ-STAR	

**Effective
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Terminals**Route**

or

(RNAV only) MXE MXE278 PENSY J48 ODF FLCON
(RNAV)-STAR(Turbojets-/E,/G,/R,/J,/L,/Q equipped) OOD
TEBEE HAYDO SBY J79 KATZN ISO J121 CHS
J79 OMN CAYSL (RNAV)-STAR

or

(Turbojets-All Others) OOD TEBEE HAYDO SBY
J79 KATZN ISO J121 CHS J79 OMN
TUXXI-STAR

or

(Water-Turbojets-/E,/G,/R,/J,/L,/Q equipped)
OOD TEBEE HAYDO SBY J209 ORF KEMPR DIW
AR19 AYBID CAYSL (RNAV)-STAR

or

(Water-Turbojets-All Others) OOD TEBEE HAYDO
SBY J209 ORF KEMPR DIW AR19 AYBID NEUBE
SWOMP SANZZ CAYSL (RNAV)-STAR

DITCH J225 JFK ORW-STAR

PTW PTW320 J64 RAV RAV312 BUF162

DITCH J225 JFK J222 CAM

(Turbojets) OOD TEBEE HAYDO SBY J79 CHS.....

MXE J75 GVE LYH MAJIC-STAR

PTW PTW320 SARAA RAV PSB J60 GSH

GSH-STAR

PTW PTW320 J64 FWA OXI-STAR

or

(GPS OR DME/DME-IRU equipped) PTW PTW320
SARMA J64 MAINE ZANLA WATSN

(RNAV)-STAR

(RNAV only) MXE PENSY J110 FLIRT J6 COLNS
GAVNN (RNAV)-STAR

or

(all others) MXE PENSY J110 FLIRT J6 COLNS
BRUSH-STAR

PTW PTW320 J64 RAV PSB PSB292 YNG CXR

MXE MXE278 PENSY J110 AIR BREMN-STAR

MXE MXE278 PENSY J110 FLIRT J6 LIT

BONHAM-STAR

MXE MXE278 PENSY J110 AIR APE DANEI-STAR..

PTW PTW320 J64 RAV PSB J60 IOW J10 LBF

SAYGE-STAR

MXE MXE278 PENSY J110 LEJOY J518 DJB

GEMNI-STAR

PREFERRED IFR ROUTES

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Terminals	Route	
	or	
	(Water-Turbojets) OOD TEBEE HAYDO SBY	
	KEMPR ILM AR21 CRANS HIILL FATHR	
	GISSH-STAR	
	or	
	(Turboprops) OOD TEBEE HAYDO SBY J79 KATZN	
	J193 J121 CHS J79 OMN MLB BLUFI-STAR.....	
	(GPS or DME/DME-IRU equipped) MXE J75 GSO	
	J75 DUNKN SHFTY (RNAV)-STAR.....	
	or	
	(WATER-Turbojets) OOD TEBEE HAYDO SBY KEMP	
	ILM AR15 HIBAC SHFTY (RNAV)-STAR.....	
	MXE J75 GVE LYH V222 HENBY	0000-2359
	MXE MXE278 PENSY J48 MOL	
	(non-advanced NAV only) MXE MXE278 PENSY	
	J48 MOL J22 VUZ AEX DAS-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) MXE	
	MXE278 PENSY J48 MOL J22 VUZ AEX TEXMX	
	(RNAV)-STAR.....	
	(GPS or DME/DME-IRU equipped) MXE MXE278	
	PENSY J48 MOL J22 VUZ AEX ROKIT	
	(RNAV)-STAR	
	or	
	(non-advanced NAV only) MXE MXE278 PENSY	
	J48 MOL J22 VUZ AEX DAS-STAR	
	MXE MXE278 PENSY J110 AIR J80 EMPTY DQN	
	CLANG-STAR	
	(Turbojets) OOD TEBEE HAYDO SBY J79 CHS	
	SSI-STAR.....	
	MXE MXE278 J110 AIR J80 SPI BRAYMER-STAR..	
	MXE MXE278 PENSY J48 MOL J22	
	MXE MXE278 PENSY J48 MOL V140 COVEY	
	MXE MXE278 PENSY J110 LEJOY HVQ	
	MXE MXE278 PENSY J110 FLIRT J6 YOCKY	
	DARBY-STAR.....	
	DITCH J225 JFK J37 ALB EEN MHT	
	(GPS or DME/DME-IRU equipped) MXE J75 GSO	
	J75 DUNKN SHFTY (RNAV)-STAR.....	
	MXE MXE278 PENSY J110 FLIRT J6 BWG	
	WILDER-STAR	
	(Water-Turbojets) OOD TEBEE HAYDO SBY	
	KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI	
	MILSY BOYUR HILEY KAINS	
	or	
	(Water-GPS or DME/DME-IRU equipped) OOD	
	TEBEE HAYDO SBY KEMPR DIW AR22 JORAY	
	HILEY (RNAV)-STAR.....	
	or	
	(Turbojets) OOD TEBEE HAYDO SBY J79 KATZN	
	ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) OOD	
	TEBEE HAYDO SBY J79 KATZN ISO J121 CHS	
	J79 OMN HILEY (RNAV)-STAR	
	or	
	(Turboprops) OOD TEBEE HAYDO SBY J79 KATZN	
	J193 J121 CHS J79 OMN ANNEY-STAR	
	PTW PTW320 J64 RAV PSB J60 DJB J34 J70	
	PMM V170 BRAVE	
	PTW PTW320 J64 RAV PSB J60 DJB J34 BAE	
	EAU-STAR	
	DITCH J225 JFK J222 PLB PLB-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped) MXE	
	J75 GSO J75 DUNKN SHFTY (RNAV)-STAR	

PREFERRED IFR ROUTES

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Terminals

Terminals	Route	Effective Times (UTC)
Nashville (BNA).....	MXE MXE278 PENSY J110 FLIRT J6 YOCKY GUITR-STAR	
New Orleans (MSY)	MXE MXE278 PENSY J48 MOL J22 MEI RYTHM-STAR	
Newport News (PHF)	OOD OOD198 SBY018 SBY VI CCV	
Orlando Executive (ORL)	OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	1100-0300
Orlando Intl (MCO)	OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	1100-0300
	or (Water-Turbojets) OOD TEBEE HAYDO SBY KEMPR ILM AR15 HIBAC APOLO ORL or (GPS or DME/DME-IRU equipped) OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR	1100-0400
	or (GPS or DME/DME-IRU equipped) OOD TEBEE HAYDO SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Pittsburgh (PIT)	MXE MXE278 PENSY J110 VINSE NESTO-STAR ..	
Portland (PWM)	DITCH V312 DRIFT CCC BOS BOS048 MESHL ..	1100-0300
Providence (PVD)	DITCH V312 DRIFT J121 HTO JORDN-STAR	
	or (Turbojet, NonAdvanced Navigation) DITCH V312 DRIFT J121 HTO V268 MINNK	
Raleigh/Durham (RDU)	OOD OOD198 SBY018 SBY ARGAL-STAR	
Richmond (RIC)	OOD OOD198 SBY018 SBY V1 CCV HPW	
Roanoke (ROA)	MXE MXE278 PENSY J48 MOL	
Rochester (ROC)	PTW PTW320 J64 RAV RAV312 J227 ULW V31 GIBBE	
San Francisco (SFO)	PTW PTW320 J64 HLC J80 OAL MOD-STAR	
Sarasota/Bradenton (SRQ)	MXE J75 TAY J85 GNV GNV174055 LAL	
Savannah (SAV)	ODD TEBEE HAYDO SBY J79 CHS	
St. Louis (STL)	MXE MXE278 PENSY J110 VHP VLA-STAR	
St. Petersburg (PIE)	MXE J75 TAY LZARD-STAR	
Tampa (TPA)	MXE J75 TAY LZARD-STAR	
	or (GPS or DME/DME-IRU equipped) MXE J75 TAY DADES (RNAV)-STAR	
Toronto (CYYZ)	PTW PTW320 J64 RAV PSB J61 BUF V36	
West Palm Beach (PBI)	(Turbojets-GPS or DME/DME-IRU equipped) OOD TEBEE HAYDO SBY J79 KATZN J193 J121 CHS J79 OMN FRWAY (RNAV)-STAR	
	or (Turbojets) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI-STAR	
	or (Water-Turbojets GPS or DME/DME-IRU equipped) OOD TEBEE HAYDO SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)-STAR	
	or (Water-Turbojets) OOD TEBEE HAYDO SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
White Plains (HPN)	DITCH V312 CYN BOOUNO-STAR	
Windsor Locks (BDL)	DITCH J225 JFK DPK DPK-STAR	
PITTSBURGH (PIT)		
Albany (ALB)	EWC EWC050 J584 SLT RKA RKA099 V449 ..	
Boston (BOS)	EWC EWC050 J584 SLT J190 ALB GDM GDM-STAR	
Buffalo (BUF)	EWC EWC038 EWC038060 DKK BUF	
Chicago Midway (MDW)	BSV BSV297 MAYZE J60 GSH GSH-STAR	
Chicago O'Hare (ORD)	BSV BSV286 OXI095 OXI OXI-STAR	
	or BSV ZANLA WATSN (RNAV)-STAR	1100-0300

PREFERRED IFR ROUTES

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Terminals

	Route	
Fort Lauderdale (FLL).....	(/E, /G, /R, /J, /L, /Q) CKB CKB197 PSK014 PSK CAE SAV J103 OMN FISEL (RNAV)-STAR.... or (all others) CKB CKB197 PSK014 PSK CAE SAV J103 OMN GISSH-STAR.....	
Houston George Bush Intrntl (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or	
Houston Hobby (HOU).....	(non-advanced NAV only) LIT J180 SWB DAS-STAR.....	
	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or	
	(non-advanced NAV only) LIT J180 SWB DAS-STAR.....	
Islip (ISP).....	EWC EWC050 J584 SLT J190 CFB HNK J68 V130 ORW V308 BOROS CCC	
Kennedy (JFK).....	EWC EWC050 J584 SLT J190 J70 LVZ LENDY-STAR	
La Guardia (LGA)	TON PSB MIP-STAR	
Miami (MIA).....	(/E, /G, /R, /J, /L, /Q) CKB CKB197 PSK014 PSK CAE SAV J103 OMN HILEY (RNAV)-STAR ... or (all others) CKB CKB197 PSK014 CAE SAV J103 OMN ANNEY-STAR	
Newark (EWR).....	EWC EWC050 J584 SLT FQM-STAR	
Philadelphia (PHL).....	JST J190 HAR V210 BUNTS	
Tampa (TPA).....	CKB197 PSK014 PSK CAE J75 TAY LZARD-STAR. or (GPS or DME/DME-IRU equipped) CKB197 PSK014 PSK CAE J75 TAY DADES (RNAV)-STAR	
White Plains (HPN).....	(Above 250 kts) EWC EWC050 J584 SLT J190 CFB DNY280 DNY VALRE-STAR	
	or	
	(250 kts or less) EWC EWC050 J584 SLT J190 CFB DNY280 DNY NOBBI-STAR	
Windsor Locks (BDL)	EWC EWC050 J584 SLT RKA SWEDE-STAR	
PORLAND (PWM)		
Chicago O'Hare (ORD)	CAM SYR J63 EHMANN YXU J547 FNT PAITN-STAR	1100-0300
Cincinnati (CVG).....	(RNAV only) ENE J547 SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) ENE J547 SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE-STAR	
La Guardia (LGA).....	CON CAM ALB PWL IGN V157	1100-0300
Newark (EWR).....	CON CAM ALB V213 SAX	1100-0300
Philadelphia (PHL).....	PSM WITCH CCC SHERL J121 BRIGS VCN-STAR ..	1100-0300
Pittsburgh (PIT).....	CAM ALB J49 HNK HNK271 J190 SLT GRACE-STAR	1100-0300
Washington Dulles (IAD)	PSM WITCH GLYDE BAF J77 SAX J6 LRP DELRO-STAR	1100-0300
PROVIDENCE (PVD)		
Atlanta (ATL)	PUT BAF J77 PTW J48 ODF WHINZ-STAR..... or (RNAV only) PUT BAF J77 PTW J48 ODF FLCON (RNAV)-STAR	1100-0300
Baltimore (BWI)	PUT PUT283 NELIE CMK J75 MXE V378 BAL	1100-0300
Boca Raton (BCT).....	(Turbojets-GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR .. or (Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR	1100-0300

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(UTC)**

Terminals**Route**

or

(Water-GPS or DME/DME-IRU equipped) PVD180
JUMPR MVY260 J174 SWL CEBEE WETRO DIW
AR19 AYBID CAYSL (RNAV)-STAR

or

(Water-Turbojets) PVD180 JUMPR MVY260 J174
SWL CEBEE WETRO DIW AR19 AYBID NEUBE
SWOMP SANZZ CAYSL (RNAV)-STAR

PUT CTR CAM SYR J63 EHMN YXU J547 FNT
PAITN-STAR

(RNAV only) CTR HNK J49 PSB MAULL KODIE CTW
TIGRR (RNAV)-STAR

or

(all others) CTR HNK J49 PSB PSB281 MAULL
SLT249 KODIE CTW081 CTW CINCE-STAR

PUT CTR CAM SYR J547 BUF YQO SPICA-STAR

1100-0300

Chicago O'Hare (ORD)

Cincinnati (CVG).....

Detroit Metro-Wayne Co (DTW)

Detroit Satellites:

Coleman A Young (DET), Windsor
(CYQG), Pontiac (PTK), Willow Run
(YIP), Ann Arbor (ARB).....

Fort Lauderdale (FLL).....

PUT CTR CAM J547 BUF YQO

1100-0300

(Water-Turbojets-GPS or DME/DME-IRU
equipped) PVD180 JUMPR MVY260 J174 SWL
CEBEE WETRO ILM AR21 CRANS FISEL

(RNAV)-STAR

or

(Water-Turboprops-GPS or DME/DME-IRU
equipped) PVD180 JUMPR MVY260 RIFLE J174
SWL CEBEE WETRO ILM AR21 CRANS FISEL

(RNAV)-STAR

or

(Turbojets-GPS or DME/DME-IRU equipped)
PWD180 JUMPR MVY260 RIFLE J174 ORF ISO
J121 CHS J79 OMN FISEL (RNAV)-STAR

or

(Turboprops) PVD180 JUMPR MVY260 RIFLE
J174 ORF J121 CHS J79 OMN MLB
BLUFI-STAR

or

(Turbojets) PVD180 JUMPR MVY260 RIFLE J174
ORF ISO J121 CHS J79 OMN GISSH-STAR

or

(Water-Turboprops) PVD180 JUMPR MVY260
RIFLE J174 SWL CEBEE WETRO ILM AR21
CRANS HIILL FATHR GISSH-STAR

or

(Water-Turbojets) PVD180 JUMPR MVY260 J174
SWL CEBEE WETRO ILM AR21 CRANS HIILL
FATHR GISSH-STAR

1100-0300

Fort Myers (RSW)

(WATER-Turbojets) PVD180 JUMPR MVY J174
SWL CEBEE WETRO ILM AR15 HIBAC SHFTY
(RNAV)-STAR

1100-0300

(Above 250 kts) PUT BAF IGN V157

or

(250 kts or less) PUT BAF V106 PWL V405

CASSH V123 HAARP

1100-0300

(Water) PVD180 JUMPR MVY260 J174 SWL
CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY
YOSSI MILSY BOYUR HILEY KAINS

or

(Water-GPS or DME/DME-IRU equipped) PVD180
JUMPR MVY260 J174 SWL CEBEE WETRO DIW
AR22 JORAY HILEY (RNAV)-STAR

or

(Turbojets) PVD180 JUMPR MVY260 RIFLE J174
ORF ISO J121 CHS J79 OMN ANNEY-STAR.....

or

Miami (MIA).....

PREFERRED IFR ROUTES

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**Effective
Times
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Terminals	Route	
	(Turbojets-GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)-STAR..... or (Turboprops) PVD180 JUMPR MVY260 RIFLE J174 ORF J121 CHS J79 OMN ANNEY-STAR.... PUT CTR CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU-STAR	
Minneapolis/St Paul (MSP)	V146 BAF V292 V213 SAX	1100-0300
Newark (EWR).....	or (250 kts or less) V146 BAF V292 V489 COATE ... PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN CORLL-STAR	1100-0300
Orlando Executive (ORL)	or (GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0300
Orlando Intl (MCO)	PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0400
	or (Water-Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBEC APOLO ORL.....	1100-0300
	or (GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR.....	1100-0400
	(GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Philadelphia (PHL).....	PVD180 JUMPR MVY260 J121 PLUME V139 BRIGS VCN-STAR.....	1100-0300
Pittsburgh (PIT).....	PUT CTR HNK HNK271 J190 SLT GRACE-STAR ...	1100-0300
Raleigh-Durham (RDU)	PVD180 JUMPR MVY260 RIFLE J174 SWL ARGAL-STAR	1100-0300
St. Louis (STL).....	PUT BAJ F77 SAX J80 J110 VHP VLA-STAR	1100-0300
Tampa (TPA).....	PUT PUT283 NELIE CMK J75 TAY LZARD-STAR or (GPS or DME/DME-IRU equipped) PUT PUT283	1100-0300
Washington Dulles (IAD)	NELIE CMK J75 TAY DADES (RNAV)-STAR	1100-0300
Washington Natl (DCA)	PUT BAF J77 SAX J6 LRP DELRO-STAR	1100-0300
	PVD180 JUMPR MVY260 J174 ATR085 ATR V308 BILIT	1100-0300
	or (GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)-STAR.....	1100-0300
West Palm Beach (PBI)	(Turbojets-GPS or DME-DME/IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	1100-0300
	or (Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO CHS J79 OMN TUXXI-STAR	1100-0300
	or (Water-GPS or DME/DME-IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBIB FRWAY (RNAV)-STAR	1100-0300
	or (Water-Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	1100-0300
READING (RDG)	KIPPI J80 J518 DJB GEMNI-STAR	
Detroit Metro Wayne Co (DTW).....		

**Effective
Times
(UTC)**

Terminals**RICHMOND (RIC)**

Terminals	Route	Effective Times (UTC)
RICHMOND (RIC)		
Cincinnati (CVG).....	(RNAV only—at or above FL240) YEAST MOL HNN090/50 HNN GAVNN (RNAV)—STAR or (RNAV only—at or below FL220) YEAST MOL HNN GAVNN (RNAV)—STAR or (all others at or above FL240) YEAST—DP MOL HNN090/50 HNN BRUSH—STAR or (all others at or below FL220) YEAST—DP MOL HNN BRUSH—STAR YEAST—DP MOL GEMNI—STAR (Turbojets—GPS or DME/DME—IRU equipped) VUZ AEX TXMEX (RNAV)—STAR or (non—advanced NAV only) VUZ AEX DAS—STAR (GPS or DME/DME—IRU equipped) VUZ AEX ROKIT (RNAV)—STAR or (non—advanced NAV only) VUZ AEX DAS—STAR.....	
Detroit Metro Wayne Co (DTW).....		
Houston George Bush Intrntl (IAH)		
Houston Hobby (HOU).....		

ROANOKE (ROA)

Detroit Metro Wayne Co (DTW).....	BKW GEMNI—STAR.....	
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ROCHESTER (ROC)

Cincinnati (CVG).....	(RNAV only) GEE BURST MAULL KODIE CTW TIGRR (RNAV)—STAR..... or (all others) GEE GEE204 BURST SLT013 SLT SLT249 KODIE CTW081 CTW CINCE—STAR	
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Detroit Satellites:

Coleman A Young (DET), Pontiac (PTK), Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP).....	YXU PICES—STAR..... or YXU GOHMA—STARR	
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1100—0300

La Guardia (LGA).....	YXU SWWAN—STAR	
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1100—0300

Newark (EWR).....	(Above 250 kts) V34 BEEPS J522 EXTOL RKA RKA HAARP—STAR	
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1100—0300

Philadelphia (PHL).....	(250 kts or less) V34 BEEPS DNY NOBBI—STAR ... (Above 250 kts) V34 BEEPS J522 HNK SHAFF—STAR	
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1100—0300

STATE COLLEGE (UNV)

Detroit Metro Wayne Co (DTW).....	(250 kts or less) V34 BEEPS J522 HNK V167 WEARD V489 COATE	
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1100—0300

SYRACUSE (SYR)

Cincinnati (CVG).....	GEE SLT PSB HAR V210 BUNTS	
	(RNAV only) SYR DINES MAULL KODIE CTW TIGRR (RNAV)—STAR..... or (all others) SYR V483 DINES GEE GEE204 KELIE SLT013 SLT SLT249 KODIE CTW081 CTW CINCE—STAR.....	

Detroit Satellites:	PSB ERI SPICA—STAR	
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1100—0300

Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP).....	BUF YXU PICES—STAR	
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1100—0300

	or BUF YXU GOHMA—STAR	
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1100—0300

	or BUF YXU SWWAN—STAR	
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1100—0300

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
TORONTO (CYYZ) Cincinnati (CVG).....	(RNAV only) THORL JHW MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) THORL JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit Metro Area:		
Willow Run (YIP), Pontiac (PTK) Coleman A Young (DET), Windsor (CYQG)	ANCOL V104 YXU PICES-STAR.....	
La Guardia (LGA)	(Above 250 kts) V252 GEE RKA-STAR	1100-0300
	or	
	(250 kts or less) V252 GEE V14 BEEPS J522 EXTOL RKA292 RKA NOBBI-STAR	
San Francisco (SFO)	GRB J106 GEP J70 ABR J32 FMG ILA PYE	
WASHINGTON/BALTIMORE METRO AREA (DCA, BWI, IAD)		
Asheville (AVL).....	FLUKY DCA246 PAUKI MOL J22 PSK SUG	1100-0300
Atlanta (ATL)	FLUKY DCA246 PAUKI MOL WHINZ-STAR	1100-0400
	or	
Binghamton (BGM)	(RNAV only) FLUKY DCA246 PAUKI MOL FLCON RNAV-STAR.....	1100-0300
Birmingham (BHM)	JERES J227 BABEE CFB	1100-0400
Boston (BOS)	FLUKY DCA246 PAUKI MOL J22 VUZ	1100-0300
	(turboprops) SWANN V268 BROSS J42 RBV J222 JFK ORW-STAR	
	or	
Buffalo (BUF).....	(Turboprops only) PALEO-DP SIE J121 HTO V308 ORW V16 WOOONS	
Charleston (CHS)	JERES J220 BUF162	1100-0300
Chattanooga (CHA).....	DAILY J61 HUBBS J193 WEAVR J121	1100-0400
Chicago Midway (MDW)	FLUKY DCA246 PAUKI MOL J22 VXV	1100-0300
Chicago O'Hare (ORD)	AML J149 FWA GSH-STAR	1100-0300
	AML J149 FWA KNOX-STAR	0000-2359
	or	
Cincinnati (CVG).....	AML J149 ROD WATSN (RNAV)-STAR	0000-2359
Cleveland (CLE)	(all others) LDN J134 COLNS BRUSH-STAR	
Columbus (CMH)	JERES J211 YNG CXR	
Detroit Metro Wayne Co (DTW).....	AML J149 HACKS APE	
	BUFFR J518 IHD J518 DJB GEMNI-STAR or	
	AML J149 SINDE GEMNI-STAR	1100-0400
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	JERES J211 J60 HAGUD LLEEO-STAR	
Fort Lauderdale (FLL).....	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN GISSH-STAR.....	
	or	
	(Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 OMN MLB BLIFI-STAR	
	or	
	(Water-Turboprops) DAILY J61 EDDYS J174 ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)-STAR ...	
Fort Myers (FMY, RSW)	AML J149	1100-0300
Fort Wayne (FWA)	(non-advanced NAV only) FLUKY DCA246 PAUKI MOL J22 VUZ AEX DAS-STAR	1100-0300
Houston George Bush Intcntl (IAH)	or	
	(Turbojets-GPS DME/DME-IRU equipped) FLUKY DCA246 PAUKI MOL J22 VUZ AEX TXMEX (RNAV)-STAR	1100-0300
	(GPS or DME/DME-IRU equipped) FLUKY DCA246 PAUKI MOL J22 VUZ AEX ROKIT (RNAV)-STAR ...	1100-0300
Houston Hobby (HOU).....		

PREFERRED IFR ROUTES

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Times
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Terminals

Route		
	or	
Indianapolis (IND)	(non-advanced NAV only) FLUKY DCA246 PAUKI	
Jacksonville (JAX).....	MOL J22 VUZ AEX DAS-STAR.....	1100-0300
Knoxville (TYS).....	AML J149 EMPTY DQN CLANG-STAR	1100-0400
La Guardia (LGA).....	DAILY J61 HUBBS J193 J121 CHS SSI-STAR	1100-0300
Louisville (SDF).....	FLUKY DCA246 PAUKI MOL 22	1100-0400
Miami (MIA).....	PALEO V44 AGARD KORRY-STAR	1100-0300
Milwaukee (MKE)	LDN J134 COLNS J6 UNCKL DARBY-STAR	
	(Turbojets) DAILY J61 HUBBS J193 J121 CHS J79	
	VRB HEATT -STAR	
	or	
	(Turboprops) DAILY J61 HUBBS J193 J121 CHS	
	J79 VRB J45 ABLIFI AR1	
	or	
	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA	
	AR1 HOBEE HEATT -STAR	
	BUFR J518 DJB J34 ALPHE J70 PMM V170	
	BRAVE	
	BUFR J518 DJB J34 BAE EAU-STAR	1100-0300
Minneapolis (MSP).....	FLUKY DCA246 PAUKI MOL J22 MEI J31	
New Orleans (MSY).....	DAILY J61 HUBBS J193 J121 CHS J79 OMN	
Orlando Intl (MCO)	BITHO-STAR	1100-0300
	or	
	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA	
	AR1 HOBEE AR6 ORL	1100-0300
Pittsburgh (PIT).....	BUFR IHD NESTO-STAR	
Rochester (ROC)	JERES J227 ULW V31 GIBBE	1100-0400
Sarasota/Bradenton (SRQ)	HAFNR GVE J75 TAY J85 GNV LAL	1100-0300
Syracuse (SYR).....	JERES J227 BABEE CFB	
Tampa (TPA).....	HAFNR GVE J75 TAY LZARD-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) HAFNR GVE	
	J75 TAY DADES (RNAV)-STAR	1100-0300
Teterboro (TEB).....	(non-advanced navigation, turbojet only) JERES	
	J227 J49 J70 LVZ LVZ-STAR	1100-0300
	or	
	(advanced navigation, turbojet only) SWANN	
	JAIKE-STAR	1100-0300
Toledo (TOL).....	(FL180 and above) J211 J64 EWC MFD VVV	
West Palm Beach (PBI)	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA	
	AR1 HOBEE SURFN-STAR	1100-0300
	or	
	DAILY J61 HUBBS J193 J121 CHS J79 OMN	
	SURFN-STAR	1100-0300
Windsor Locks (BDL)	SWANN V268 BROSS J42 RBV J222 JFK DPK	
	DPK-STAR	1100-0400
From BALTIMORE (BWI) only		
Albany (ALB).....	SWANN-DP OOD J42 RBV LGA LGA055 V487	
	CANAN V130	1100-0300
Boca Raton (BCT).....	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) DAILY J61 HUBBS KEMPR WETRO	
	DIW AR19 AYBID CAYSL (RNAV)-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR	
	WETRO DIW AR19 AYBID MIMMI NEUBE	
	SWOMP SANZZ CAYSL	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	DAILY J61 HUBBS J193 HCM ISO J121 CHS	
	J79 OMN CAYSL (RNAV)-STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO	
	J121 CHS J79 OMN TUXXI-STAR	
Boston (BOS)	(Turbojets) SWANN-DP OOD J42 RBV J222 JFK	
	ORW-STAR	
	or	

PREFERRED IFR ROUTES
**Effective
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Terminals	Route	
Bridgeport (BDR)	(Turboprops) PALEO-DP SIE J121 HT0 V308 ORW V16 WOONS	
Charleston (CHS)	PALEO-DP SIE J121 MAD193 KEYED	1100-0300
Chicago (MDW)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
Chicago (ORD)	AML J149 FWA GOSHEN-STAR	
	AML J149 ROD WATSN (RNAV)-STAR	
	or	
	AML J149 FWA KNOX-STAR	0000-2359
Dallas/Forth Worth (DFW)	(RNAV only) TERPZ-DP LDN J134 COLNS J6 HVQ J6 LIT BONHAM-STAR	1100-0300
	or	
Dayton (DAY)	LDB J134 COLNS J6 HVQ J6 LIT BONHAM-STAR ..	1100-0300
Denver (DEN)	AML J149 HACKS APE DANEI-STAR	1100-0400
	TERPZ (RNAV)-DP LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD-STAR	1100-0300
	or	
	LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD-STAR	1100-0300
Fort Lauderdale (FLL, FXE, OPF)	(Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN MLB BLUFI-STAR	
	or	
	(Water-Turboprops) V93 PXT V213 COLIN HCM ILM AR21 CRANS HIILL FATHR GISSH-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FISEL (RNAV)-STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN GISSH-STAR	
	or	
	(Water-Turboprops-GPS or DME/DME-IRU equipped) V93 PXT V213 COLIN HCM ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS HILL FATHR GISSH-STAR	
Fort Myers (FYM, RSW)	(Turbojets-GPS or DME/DME-IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)-STAR ...	
	or	
	(WATER-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC SHFTY (RNAV)-STAR	
Hartford (HFD)	SWANN-DP OOD J42 RBV J222 JFK DPK MAD V1 .	1100-0300
Islip (ISP)	PALEO-DP SIE J121 SARDI CCC	1100-0300
Jacksonville (JAX).....	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS SSI-STAR	
Kansas City (MCI)	TERPZ (RNAV)-DP LDN J134 HNN J134 STL MCM BRAYMER-STAR	1100-0300
	or	
Louisville (SDF)	LDN J134 HNN J134 STL MCM BRAYMER-STAR ..	1100-0300
	(RNAV only) TERPZ DP LDN J134 COLNS J6 HVQ J6 UNCKL DARBY-STAR	
	or	
	LDN J134 COLNS J6 HVQ J 6 UNCKL DARBY-STAR	
Memphis (MEM)	(RNAV only) TERPZ-DP LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)-STAR	1100-0300
	or	
	LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)-STAR	1100-0300

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN HILEY (RNAV)-STAR or (Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN ANNEY-STAR or (Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY HILEY (RNAV)-STAR..... or (Water-Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN ANNEY-STAR or (Water-Turboprops-GPS or DME/DME-IRU equipped) V93 PXT V213 COLIN HCM J193 CVI DIW AR22 JORAY HILEY (RNAV)-STAR..... or (Water-Turboprops) V93 PXT V213 COLIN HCM J193 CVI DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Nashville (BNA)	(RNAV only) TERPZ-DP LDN J134 COLNS J6 HVQ J6 YOCKY GUITR-STAR or LDN J134 COLNS J6 HVQ J6 YOCKY GUITR-STAR	1100-0300
Newark (EWR)	SWANN-DP V445 DQO DYLIN-STAR	1100-0300
Orlando Executive (ORL)	(GPS or DME/DME IRU equipped) SWANN-DP V445 DQO PHLBO (RNAV)-STAR	1100-0300
Orlando Intl (MCO)	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD(RNAV)-STAR	1100-0400
Phoenix Sky Harbor (PHX)	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOLO ORL	
Providence (PVD)	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR	1100-0400
Savannah (SAV)	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
St. Louis (STL)	TERPZ(RNAV)-DP LDN J134 HNN J134 LBL J19 ZUN EAGUL (RNAV)-STAR	1100-0300
Teterboro (TEB)	or LDN J134 HNN J134 LBL J19 ZUN BUNTR-STAR . SWANN-DP OOD J42 RBV HTO GREEN-STAR	1100-0400
	or (Turbojets, Non-Advanced Nav only) SWANN-DP OOD J42 RBV HTO V268 MINNK.....	1100-0400
	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
	TERPZ (RNAV)-DP LDN J134 HNN J134 FLM PVX QBALL-STAR	1100-0300
	or LDN J134 HNN J134 FLM PVX QBALL-STAR	1100-0300
	(Turbojets, Non-Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ-STAR	1100-0300

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	1100–0300
	or (Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	1100–0300
	or (Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI.....	1100–0300
White Plains (HPN)	SWANN–DP OOD J150 CYN BOUNO–STAR	1100–0300
Windsor Locks (BDL)	SWANN–DP ODD J42 RBV J222 JFK DPK–STAR	1100–0300
From WASHINGTON DULLES (IAD) only		
Albany (ALB)	SWANN V268 BROSS J42 RBV LGA LGA055 V487 CANAN V130	1100–0400
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	1100–0400
	or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	1100–0400
	or (Water–Turbojets GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	1100–0400
	or (Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	1100–0400
Bridgeport (BDR)	AML091 PALEO V44 SIE J121 MAD193 KEYED ...	1100–0400
Charleston (CHS)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	1100–0400
Chicago (MDW)	AML J149 FWA GOSHEN–STAR	
Chicago (ORD)	AML J149 ROD WATSN (RNAV)–STAR	
	or AML J149 FWA KNOX–STAR	
Dallas/Fort Worth (DFW)	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
	or LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
Dayton (DAY)	AML J149 HACKS APE DANEI–STAR	1100–0400
Denver (DEN)	(RNAV only) BLUES LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
	or LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	1100–0300
	or (Turbojets) DAILY J61 HUBBS J193 J121 CHS J79 OMN GISSH–STAR	1100–0300
	or (Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 VRB BLIFI–STAR	1100–0300

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals**Route**

	(Water-Turboprops-GPS or DME/DME-IRU equipped) DAILY J61 EDDYS J174 ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	
	(Water-Turboprops) DAILY J61 EDDYS J174 ILM AR21 CRANS FATHR GISSH-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FISEL (RNAV)-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FATHR GISSH-STAR	
	(Turbojets-GPS or DME/DME-IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)-STAR ...	
	or	
	(WATER-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO ILM AR15 HIBAC SHFTY (RNAV)-STAR.....	
	SWANN V268 BROSS J42 RBV J222 JFK DPK MAD V1	1100-0300
	AML091 PALEO V44 SIE J121 SARDI CCC	1100-0400
	(Turbojets) DAILY J61 HUBBS J193 HCM FKN CHS SSI-STAR.....	
	(RNAV only) BLUES LDN J134 HNN J134 STL MCM BRAYMER-STAR	1100-0300
	or	
	LDN J134 HNN J134 STL MCM BRAYMER-STAR ..	1100-0300
	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 UNCKL DARBY-STAR	1100-0300
	or	
	LDN J134 COLNS J6 HVQ J6 UNCKL DARBY-STAR	1100-0300
	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)-STAR	1100-0300
	or	
	LDN J134 COLNS J6 HVQ J6 BWG WLDER-STAR ..	1100-0300
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY HILEY (RNAV)-STAR.....	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN HILEY (RNAV)-STAR	
	or	
	(Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS.....	
	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 YOCKY GUITR-STAR	1100-0300
	or	
	LDN J134 COLNS J6 HVQ J6 YOCKY GUITR-STAR	1100-0300
	(GPS or DME/DME-IRU equipped) AML SWANN V445 DQO PHLBO (RNAV)-STAR	1100-0400
	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400

Fort Myers (FMY, RSW)

Hartford (HFD)

Islip (ISP)

Jacksonville (JAX)

Kansas City (MCI)

Louisville (SDF)

Memphis (MEM)

Miami (MIA)

Nashville (BNA)

Newark (EWR)

Orlando Executive (ORL)

Terminals	Route	Effective Times (UTC)
Orlando Intl (MCO)	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOLLO ORL or (GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR..... or (GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR..... (RNAV only) BLUES LDN J134 HNN J134 LBL J19 ZUN EAGUL(RNAV)-STAR	1100-0400
Phoenix (PHX)	ZUN EAGUL(RNAV)-STAR	1100-0300
Providence (PVD)	(RNAV only) BLUES LDN J134 HNN J134 LBL J19 ZUN BUNTR-STAR . SWANN V268 BROSS J42 RBV HTO GREEN-STAR	1100-0300
Savannah (SAV)	or (Turbojets, Non-Advanced Navigation) SWANN V268 BROSS J42 RBV HTO V268 MINNK	1100-0400
St. Louis (STL)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	1100-0300
Teterboro (TEB).....	(RNAV only) BLUES LDN J134 HNN J134 FLM PXV QBALL-STAR	1100-0300
West Palm Beach (PBI)	or LDN J134 HNN J134 FLM PXV QBALL-STAR	1100-0300
White Plains (HPN)	(Turbojets, Non-Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ-STAR	1100-0300
From WASHINGTON NATL (DCA) only	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR..... or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI-STAR..... or (Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	1100-0400
Albany (ALB).....	(Water-Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI..... SWANN V268 BROSS J150 CYN BOUNO-STAR	1100-0400
Boca Raton (BCT).....	SWANN V268 BROSS J42 RBV LGA LGA055 V487 CANAN V130	1100-0400
Boston (BOS)	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR	1100-0400
Bridgeport (BDR).....	or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI-STAR.....	1100-0400
Charleston (CHS)	or (Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR	1100-0400
Chicago (MDW).....	or (Water-Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	1100-0400
	(Turboprops) PALEO-DP SIE J121 HTO V308 ORW V16 WOONS	
	PALEO V44 SIE J121 MAD193 KEYED	
	(Turbojets) DAILY J161 HUBBS J193 HCM FKN J79 CHS	
	AMI I49 FWA GOSHEN-STAR	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
Chicago (ORD)	AML J149 ROD WATSN (RNAV)-STAR	
	or	
Dallas/Fort Worth (DFW)	AML J149 FWA KNOX-STAR	
	LDN J134 COLNS J6 HVQ J6 LIT	
	BONHAM-STAR	1100-0300
Dayton (DAY)	AML J149 HACKS APE DANEI-STAR	1100-0400
Denver (DEN)	LDN J134 HNN J134 STL J110 GCK J154 RYLINE	
	DANDD-STAR	1100-0300
Fort Lauderdale (FLL).....	(Turbojets-GPS or DME/DME-IRU equipped)	
	DAILY J61 HUBBS J193 HCM ISO J121 CHS	
	J79 OMN FISEL (RNAV)-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21	
	CRANS FISEL (RNAV)-STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO	
	J121 CHS J79 OMN GISSH-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM	
	AR21 CRANS HIILL FATHR GISSH-STAR	
	or	
	(Water-Turboprops-GPS or DME/DME-IRU equipped) DAILY J61 EDDYS J174 ILM AR21	
	CRANS FISEL (RNAV)-STAR	
	or	
	(Turboprops) DAILY J61 HUBBS J193 J121 CHS	
	J79 OMN MLB BLIFI-STAR	
	or	
	(Water-Turboprops) DAILY J61 EDDYS J174 ILM	
	AR21 CRANS HIILL FATHR GISSH-STAR	
Fort Myers (FMY, RSW)	(Turbojets-GPS or DME/DME-IRU equipped)	
	HAFNR GVE J75 DUNKN SHFTY (RNAV)-STAR ...	
	or	
	(WATER-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO	
	ILM AR15 HIBAC SHFTY (RNAV)-STAR.....	
Hartford (HFD)	SWANN V268 BROSS J42 RBV J222 JFK DPK	
	MAD V1	1100-0400
IIslip (ISP).....	PALEO V44 SIE J121 SARDI CCC	1100-0400
Jacksonville (JAX).....	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79	
	CHS SSI-STAR.....	
Kansas City (MCI)	LDN J134 HNN J134 STL MCM	
	BRAYMER-STAR	1100-0300
Louisville (SDF).....	LDN J134 COLNS J6 HVQ J6 UNCKL	
	DARBY-STAR.....	1100-0300
Memphis (MEM)	LDN J134 COLNS J6 HVQ J6 BWG	
	WLDER-STAR	1100-0300
Miami (MIA, TMB, HST).....	(Turbojets-GPS or DME/DME-IRU equipped)	
	DAILY J61 HUBBS J193 HCM ISO J121 CHS	
	J79 OMN HILEY (RNAV)-STAR.....	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR WETRO	
	DIW AR22 JORAY HILEY (RNAV)-STAR.....	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO	
	J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR	
	WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI	
	MILSY BOYUR HILEY KAINS	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
Nashville (BNA)	LDN J134 COLNS J6 HVQ J6 YOCKY GUITR-STAR	1100-0300
Newark (EWR).....	(GPS or DME/DME-IRU equipped) SWANN V445 DQO PHLBO (RNAV)-STAR	1100-0400
Orlando Executive (ORL).....	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Orlando Intl (MCO)	(Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOL0 ORL	
	or	
	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)-STAR	1100-0400
	or	
	(GPS or DME/DME-IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)-STAR	1100-0400
Phoenix (PHX)	LDN J134 HNN J134 LBL J19 ZUN BUNTR-STAR .	1100-0300
Providence (PVD)	SWANN V268 BROSS J42 RBV HTO GREEN-STAR. or	1100-0400
	(Turbojets, Non-Advanced Navigation) SWANN V268 BROSS J42 RBV HTO V268 MINK	1100-0400
Savannah (SAV)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
St. Louis (STL)	LDN J134 HNN J134 FLM PVX QBALL-STAR	1100-0300
Teterboro (TEB).....	(Turbojets, Non-Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ-STAR	1100-0300
West Palm Beach (PBI)	(Turbojets-GPS or DME/DME-IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR.....	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI-STAR.....	
	or	
	(Water-Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI.....	
White Plains (HPN)	SWANN V268 BROSS J150 CYN BOUNO-STAR	1100-0400
WILKES-BARRE/SCRANTON (AVP)		
Cincinnati (CVG).....	(RNAV only) LVZ SEG PSB MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) LVZ SEG PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
WINDSOR LOCKS (BDL)		
Atlanta (ATL)	PWL SAX J77 PTW J48 ODF WHINZ-STAR	
	or	
	(RNAV only) PWL SAX J77 PTW J48 ODF FLC0N (RNAV)-STAR	
Baltimore (BWI)	PWL CMK J75 MXE V378 BAL	1100-0300
Boca Raton (BCT).....	(Turbojets GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)-STAR	
	or	
	(Turbojets) COASTAL (HI)-DP GEDIC J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)-STAR	
	or	

PREFERRED IFR ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
	(Water-Turbojets) COASTAL (HI)-DP GEDIC J174	
Chicago O'Hare (ORD)	SWL CEBEE WETRO DIW AR19 AYBID MIMMI	
Cincinnati (CVG).....	NEUBE SWOMP SANZZ CAYSL	
Dallas/Ft Worth (DFW).....	CTR CAM SYR J63 EHMAM YXU J547 FNT	
Detroit Metro Wayne Co (DTW).....	PAITN-STAR	1100-0300
Detroit Satellites:	CTR HNK J49 PSB PSB281 MAULL SLT249 KODIE	
Ann Arbor (ARB), Coleman A Young Muni (DET), Pontiac (PTK), Windsor (CYQG), Willow Run (YIP)	CTW081 CTW CINCE-STAR	
Detroit Satellites:	PWL SAX J6 LIT BYP	1100-0300
Ann Arbor (ARB), Coleman A Young Muni (DET), Pontiac (PTK), Windsor (CYQG), Willow Run (YIP)	CTR CAM J547 BUF BUF267 YQ0094 QUO	1100-0300
	SPICA-STAR	
Fort Lauderdale (FLL, FXE, OPF)	SYR J547 YXU GOHMA-STAR	1100-0300
	or	
	SYR J547 YXU SWWAN-STAR	1100-0300
	or	
	SYR J547 YXU PICES-STAR	
	or	
	CTR CAM J547 BUF YQ0	1100-0300
	(Water-Turbojets) COASTAL (HI)-DEP GEDIC J174	
	SWL CEBEE WETRO ILM AR21 CRANS HIILL	
	FATHR GISSH-STAR	1100-0300
	or	
	(Water-Turboprops) COASTAL (HI)-DP GEDIC	
	J174 ILM AR21 CRANS HIILL FATHR	
	GISSH-STAR	1100-0300
	or	
	(Turbojets) COASTAL (HI)-DP GEDIC J174 ORF	
	ISO J121 CHS J79 OMN GISSH-STAR.....	1100-0300
	or	
	(Turboprops) COASTAL (HI)-DP GEDIC J174 ORF	
	J121 CHS J79 OMN MLB BLIFI-STAR.....	1100-0300
	or	
	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) COASTAL (HI)-DP GEDIC J174 SWL	
	CEBEE WETRO ILM AR21 CRANS FISEL	
	(RNAV)-STAR.....	1100-0300
	or	
	(Water-Turboprops-GPS or DME/DME-IRU	
	equipped) COASTAL (HI)-DP GEDIC J174 ILM	
	AR21 CRANS FISEL (RNAV)-STAR.....	1100-0300
	or	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	COASTAL (HI)-DP GEDIC J174 ORF ISO J121	
	CHS J79 OMN FISEL (RNAV)-STAR	1100-0300
Fort Myers (RSW)	(WATER-Turbojets) COASTAL (HI)-DP GEDIC J174	
	SWL CEBEE WETRO ILM AR15 HIBAC SHFTY	
	(RNAV)-STAR.....	
Miami (MIA, TMB, HST)	(Turbojets-GPS or DME/DME equipped) COASTAL	
	(HI)-DP GEDIC J174 ORF ISO J121 CHS J79	
	OMN HILEY (RNAV)-STAR	
	or	
	(Turbojets) COASTAL (HI)-DP GEDIC J174 ORF	
	ISO J121 CHS J79 OMN ANNEY-STAR	
	or	
	(Water-Turbojets-GPS or DME/DME-IRU	
	equipped) COASTAL (HI)-DP GEDIC J174 SWL	
	CEBEE WETRO DIW AR22 JORAY HILEY	
	(RNAV)-STAR.....	
	or	
	(Water-Turbojets) COASTAL (HI)-DP GEDIC J174	
	SWL CEBEE WETRO DIW AR22 JORAY OSOGY	
	ENVOY YOSSI MILSY BOYUR HILEY KAINS.....	
	or	
	(Turboprops) COASTAL (HI)-DP GEDIC J174 ORF	
	J121 CHS J79 OMN ANNEY-STAR	

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
Minneapolis/St Paul (MSP)	CTR CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU-STAR.....	1100-0300
Orlando Exec (ORL)	COASTAL (HI)-DP GEDIC J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO ILM	1100-0400
Orlando Intl (MCO)	AR15 HIBACK CWRLD (RNAV)-STAR	1100-0300
	COASTAL (HI)-DP GEDIC J174 ORF J121 CHS J79 OMN BITHO-STAR	1100-0300
	or (Water-Turbojets) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO	1100-0300
	ORL.....	1100-0300
	or (GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 ORF J121 CHS J79 OMN CWRLD (RNAV)-STAR.....	1100-0400
	or (GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO ILM	1100-0400
Philadelphia (PHL).....	AR15 HIBAC CWRLD (RNAV)-STAR	1100-0300
Pittsburgh (PIT).....	COASTAL-DP SHERL J121 BRIGS VCN-STAR	1100-0300
Raleigh-Durham (RDU)	CTR HNK HNK271 J190 SLT GRACE-STAR	1100-0300
St. Louis (STL).....	PWL CMK J75 GVE SBV.....	1100-0300
Tampa (TPA).....	PWL SAX J80 VHP VLA-STAR	1100-0300
Washington Dulles (IAD)	PWL CMK J75 TAY LZARD-STAR.....	1100-0300
Washington Natl (DCA)	PWL SAX J6 LRP DELRO-STAR	1100-0300
	COASTAL-DP GEDIC J174 ATR085 ATR V308 BILIT	1100-0300
	or (GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 ATR085 ATR V308 LAFLN BILIT (RNAV)-STAR	1100-0300
West Palm Beach (PBI)	(Turbojets-GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)-STAR	1100-0300
	or (Water-Turbojets) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	1100-0300
	or (Water-Turbojets-GPS or DME/DME-IRU equipped) COASTAL (HI)-DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)-STAR	1100-0300
	or (Turbojets) COASTAL (HI)-DP GEDIC J174 ORF ISO J121 CHS J79 OMN TUXXI-STAR.....	1100-0300

PREFERRED IFR ROUTES
SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

**Effective
Times
(UTC)**

Terminals	Route	
Traffic overflying Atlanta Center Eastbound originating South of a line from DFW to JFK: GRD J209 RDU J207 FKN J79 JFK DPK		
DPK-STAR	(Jet only) GRD J209 RDU J207 FKN J79 JFK	
BOS	ORW-STAR	
	or	
BWI	(Prop only) SIE J121 HTO V308 ORW V16 WOONS.....	
	SPA J14 RIC OTT-STAR	
	or	
(GPS or DME/DME-IRU equipped) SPA J14 RIC RAVNN (RNAV)STAR.....	SPA J14 RIC IRONS-STAR	
DCA	or	
JFK	(GPS or DME/DME-IRU equipped) SPA J14 RIC OJAAY (RNAV)-STAR	
LGA	GRD J209 ORF J121 SIE CAMRN-STAR	
PHL	AHN J208 HPW J191 PXT KORRY-STAR	
Traffic originating East of Chicago Terminating Denver: DJB	SPA J14 J51 FAK DPNT-STAR	
	J60 IOW DSM J144 OBH J10 LBF	
	SAYGE-STAR	1300-0100
BAE	J16 MCW ONL J114 SNY LANDR-STAR	
STL	STL J110 GCK J154 RYLINE DANDD-STAR	1300-0100
Traffic overflying Cleveland Center and South of SLT: HPN	(Above 250 kts) SLT J190 CFB DNY280 DNY VALRE-STAR	
	or	
	PSB J49 CFB220 CFB DNY280 DNY VALRE-STAR	
	or	
	(250 kts or less) SLT J190 CFB DNY280 DNY NOBBI-STAR	
	or	
	PSB J49 CFB220 CFB DNY280 DNY NOBBI-STAR	
Traffic originating South of Wilmington, NC: ILM J109 FAK DYLIN-STAR	1100-0300	

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
JFK.....	ORF J121 SIE CAMRN-STAR	1100-0300
LGA.....	ILM TYI HPW J191 PXT KORRY-STAR	1100-0300
Traffic overflying Indianapolis Center area Eastbound:		
BOS	ROD J29 J82 ALB GDM GDM-STAR	1100-0300
JFK	ROD J29 J70 LVZ LENDY-STAR	1100-0300
LGA	ROD J29 J146 MIP-STAR	1100-0300
	or	
PHL	BKW J42 GVE KORRY-STAR	1100-0300
	or	
PIT	ROD J152 HAR V210 BUNTS	1100-0300
	or	
TEB/MMU/CDW SATELLITES	BKW J42 GVE DPNT-STAR	1100-0300
	or	
HNN JPU V117 WISKE	APE CTW V443 WISKE	
	or	
Traffic overflying Indianapolis Center area Eastbound originating North and West of a line from DFW to JFK:	HNN JPU V117 WISKE	
ABE	(Non-Advanced Nav Aircraft only) ROD J29	
ACY	RID CXR H146	
BDL	ROD J152 HAR LRP DQO ENO SIE	
BWI	ROD J29 JHW J82 WILET RKA SWEDE-STAR .	
CEF	ROD J152 J162 MGW EMI-STAR	
FRG	ROD J29 JHW J82 ALB	
	or	
HPN	ROD J29 JHW J82 J522 HNK IGN V58 V91	
	or	
(250 kts or less) ROD J29 JHW J82 WILET DNY	CCC	
NOBBI-STAR	(Above 250 kts) ROD J29 JHW J82 WILET	
ISP	DNY VALRE-STAR	
	or	
TEB/MMU/CDW/LDJ	(Above 250 kts) ROD J152 J178 PSB J49	
Traffic overflying Indianapolis Center area Eastbound originating South and East of a line from DFW to JFK:	HNK J68 V130 TOMES MAD V34 CREAM V16	
ABE	CCC	
	or	
ACY	(250 kts or less) ROD J152 J78 PSB J49	
BWI	HNK DNY LOVES-STAR	
	or	
DAA	ROD J29 JHW J70 LVZ-STAR	
	or	
DOV	BKW J147 CSN OTT-STAR.....	
	or	
HPN.....	(GPS or DME/DME-IRU equipped) BKW J147	
IAD	CSN RAVNN (RNAV)-STAR	
	or	
LFI	BKW J213 V143 V4 AML	
	or	
NSF	BKW ELDEE (RNAV)-STAR	
PHL	BKW J42 GVE ENO-STAR	
TEB/MMU/CDW/LDJ	BKW J42 OOD J150 CYN BOUNO-STAR	
	or	
WRI	BKW ROYIL-STAR	1100-1830 and 2230-0300
	or	
LFI	BKW SHNON (RNAV)-STAR	1100-1830 and 2230-0300
	or	
NSF	GSO J14 CREWE J51 FAK COATT-STAR	1830-2230
PHL	or	
TEB/MMU/CDW/LDJ	GSO J14 CREWE J51 FAK BARIN	
	(RNAV)-STAR	
WRI	BKW J42 MOL J24 HCM	
	or	
LFI	BKW J213 FINKS AML259 AML	
	or	
NSF	BKW J42 GVE DPNT-STAR	
PHL	(Advanced-Nav Aircraft only) BKW J42 GVE	
TEB/MMU/CDW/LDJ	JAIKE-STAR	
	or	
WRI	BKW J42 OTT SIE-STAR	

**Effective
Times
(UTC)**

Terminals	Route	
Traffic overflying Indianapolis (ZID) or Cleveland Centers (ZOB) landing in the Washington Metropolitan Area: BWI	MGW EMI-STAR	1100-0300
	or	
	BKW J147 CSN OTT-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) BKW J147 CSN RAVNN (RNAV)-STAR	1100-0300
DCA	APE J30 BUCKO BUCKO-STAR	1100-0300
	or	
	BKW FINKS-STAR.....	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) APE J30 BUCKO ELDEE (RNAV)-STAR.....	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) BKW ELDEE (RNAV)-STAR.....	1100-0300
	or	
	APE J30 SHAAR WZRRD-STAR	1100-0300
	or	
	APE J30 SHAAR ELDEE	1100-0300
	or	
	BKW ELDEE (RNAV)-STAR	1100-0300
	or	
IAD.....	APE AIR MGW MGW121 VERNI ESL	
	ROYIL-STAR	
	or	
	BKW ROYIL-STAR	
	or	
	HVQ ROYIL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) APE AIR MGW VERNI ESL SHNON (RNAV)-STAR.....	
	or	
	BKW SHNON (RNAV)-STAR	
	or	
	HVQ SHNON (RNAV)-STAR.....	
Traffic overflying Elwood City VORTAC (EWC) Northbound: ROC	EWC EWC050130 GEE	
BUF	EWC DKK DKK020 WELL.....	
EWC EWC050130		
Traffic entering ZBW originating South and West of a line from HNK to ROC landing HYA/ACK/MVY: J16	J16 ALB ENE V167 LFV	1100-0300
J82	J82 ALB ENE V167 LFV	1100-0300
J190	J190 ALB ENE V167 LFV	1100-0300
Traffic entering ZBW via RBV or JFK landing HYA: RBV	J62 MVY241 MVY	
	or	
	FLAPE MVY	1100-0300
JFK	J79 MVY241 MVY	
	or	
	FLAPE MVY	1100-0300
Traffic entering ZBW via RBV or JFK landing MVY: RBV	LIBBE FLAPE MVY	1100-0300
JFK	J79 MVY241 MVY	
	or	
	LIBBE FLAPE MVY.....	1100-0300
Traffic entering ZBW via RBV or JFK landing ACK: RBV	J62 ACK	
	or	
	FLAPE CLAMY ACK	1100-0300
	or	

Terminals	Route	Effective Times (UTC)
	J79 J62 ACK..... or FLAPE CLAMY ACK..... or RIFLE DEEPO (RNAV)–STAR	1100–0300
Traffic entering ZBW via J174 or J121 landing HYA: J121	J121 SHLEP J62 MVY241 MVY .. or J121 SHLEP LIBBE FLAPE MVY	1100–0300
J174	J174 RIFLE J62 MVY241 MVY .. or J174 RIFLE FLAPE MVY	1100–0300
Traffic entering ZBW via J174 or J121 landing MVY: J121	J121 SHLEP J62 MVY241 MVY .. or J121 SHLEP LIBBE FLAPE MVY	1100–0300
J174	J174 RIFLE J62 MVY241 MVY .. or J174 RIFLE LIBBE FLAPE MVY	1100–0300
Traffic entering ZBW via J174 or J121 landing ACK: J121	J121 SHLEP J62 ACK .. or J121 SHLEP FLAPE CLAMY ..	1100–0300
J174	J174 RIFLE J62 ACK .. or J174 RIFLE FLAPE CLAMY .. or J174 RIFLE DEEPO (RNAV)–STAR	1100–0300

HIGH ALTITUDE—SINGLE DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Effective Times (UTC)
J6	Lancaster, PA to Little Rock, AR	Southwest	1100–0300
J8	Charleston, WV to Casanova, VA	East	1100–0300
J14	Greensboro, NC to Richmond, VA	Northeast	1100–0300
J22	Montebello, VA to Pulaski, VA	Southwest	1100–0300
J30	Joliet, IL to TRIXY Int., VA	East	1100–0300
J34	Bellaire, OH to TRIXY Int., VA	East	1100–0300
J37	Coyle, NJ to Spartanburg, SC	Southwest	1100–0300
J40	Wilmington, NC to Richmond, VA	North	1100–0300
J42	Texarkana, AR to Robbinsville, NJ	Northeast	1100–0300
J48	Pottstown, PA to Foothills, GA	Southwest	1100–0300
J51	Columbia, SC to Yardley, NJ	Northeast	1100–0300
J52	Columbia, SC to Richmond, VA	Northeast	1100–0300
J55	Florence, SC to HUBBS Int., VA	Northeast	1100–0300
J61	Philipsburg, PA to EDDYS Int., VA	South	1100–0300
J75	Modena, PA to Greensboro, NC	Southwest	1100–0300
J109	Wilmington, NC to Buffalo, NY	North	1100–0300
J134	Linden, VA to Henderson, WV	West	1100–0300
J147	Beckley, WV to Casanova, VA	Northeast	1100–0300
J149	Armel, VA to Rosewood, OH	West	1100–0300
J150	Gordonsville, VA to Hampton, NY	East	1100–0300
J162	Bellaire, OH to Martinsburg, WV	East	1100–0300
J165	Charleston, SC to Richmond, VA	North	1100–0300
J191	Wilmington, NC to Robbinsville, NJ	North	1100–0300
J193	HUBBS Int., VA to Wilmington, NC	South	1100–0300
J207	Florence, SC to Franklin, VA	Northeast	1100–0300
J208	Athens, GA to Hopewell, VA	Northeast	1100–0300
J209	Greenwood, SC to Norfolk, VA	Northeast	1100–0300
J211	Westminster, MD to Johnstown, PA	Northwest	1100–0300
J213	Beckley, WV to Armel, VA	East	1100–0300
J518	Baltimore, MD to Indian Head, PA	Northwest	1100–0300

Q-ROUTES

Q-ROUTES REGULATORY

Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this AF/D volume have at least part of one of their leg segments within this volume's area of coverage.

GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note "GNSS REQUIRED".

Route	Segment	DME
Q1	ELMAA–ERAVE	BTG, OLM, HQM, HUH, UBG
	ERAVE–EASON	BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG
	EASON–EBINY	CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT
	EBINY–ENVIE	CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS
	ENVIE–ETCHY	OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS
	ETCHY–POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
Q2	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–HOBOL	BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS
	HOBOL–ITU CO	TFD, GBN, BLH, PXR, TUS, CIE, SSO
	ITU CO–NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
Q3	FEPOT–FAMUK	OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG
	FAMUK–FRFLY	BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT
	FRFLY–FINER	OED, EUG, RBL, LMT, ENI, CVO, FJS
	FINER–FOWND	OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS
	FOWND–POINT REYES	LIN, ECA, PYE, RBL, SAC, ENI
Q4	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–SCOLE	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SCOLE–SPTFR	EED, IPL, BZA, GBN, TFD, PXR, BLH
	SPTFR–ZEBOL	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	ZEBOL–SKTRR	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
	SKTRR–EL PASO	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
Q5	HAROB–HISKU	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
	HISKU–HARPR	CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV
	HARPR–HOME G	SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	HOME G–HUTU	OAK, ECA, PYE, LIN, SAC, ENI, RBL
Q7	HUTU–STIKM	CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA
	JINMO–JOGEN	LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG
	JOGEN–JUNEJ	RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS
	JUNEJ–JAGWA	OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ
Q9	JAGWA–AVENAL	OAK, ECA, PYE, LIN, SAC, ENI, RBL
	SUMMA–SMIGE	CVO, EUG, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	SMIGE–SUNBE	OAK, ECA, PYE, LIN, SAC, ENI, RBL
	SUNBE–REBRG	CVO, EUG, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
Q11	REBRG–DERBB	OAK, ECA, PYE, LIN, SAC, ENI, RBL
	PAAGE–PAWLI	CVO, EUG, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	PAWLI–PITVE	OAK, ECA, PYE, LIN, SAC, ENI, RBL
	PITVE–PUSHH	CVO, EUG, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	PUSHH–LOS ANGELES	OAK, ECA, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
Q13	All segments	None; GNSS required
Q15	All segments	None; GNSS required
Q19	PLESS–NASHVILLE	ENL, GQO, PVX, BNA, IIU, FAM, BWG, CSX
Q20	CORONA–HONDS	CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME
	HONDS–UNNOS	CNX, INK, CME, TXO, TCC
	UNNOS–FUSCO	FST, ACH, INK, CME, SJT, TXO, TCC
	FUSCO–JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST
Q21	JONEZ–RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
Q22	GUSTY–OYSTY	AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV
	OYSTY–ACMES	RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJI
	ACMES–CATLN	SJI, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI

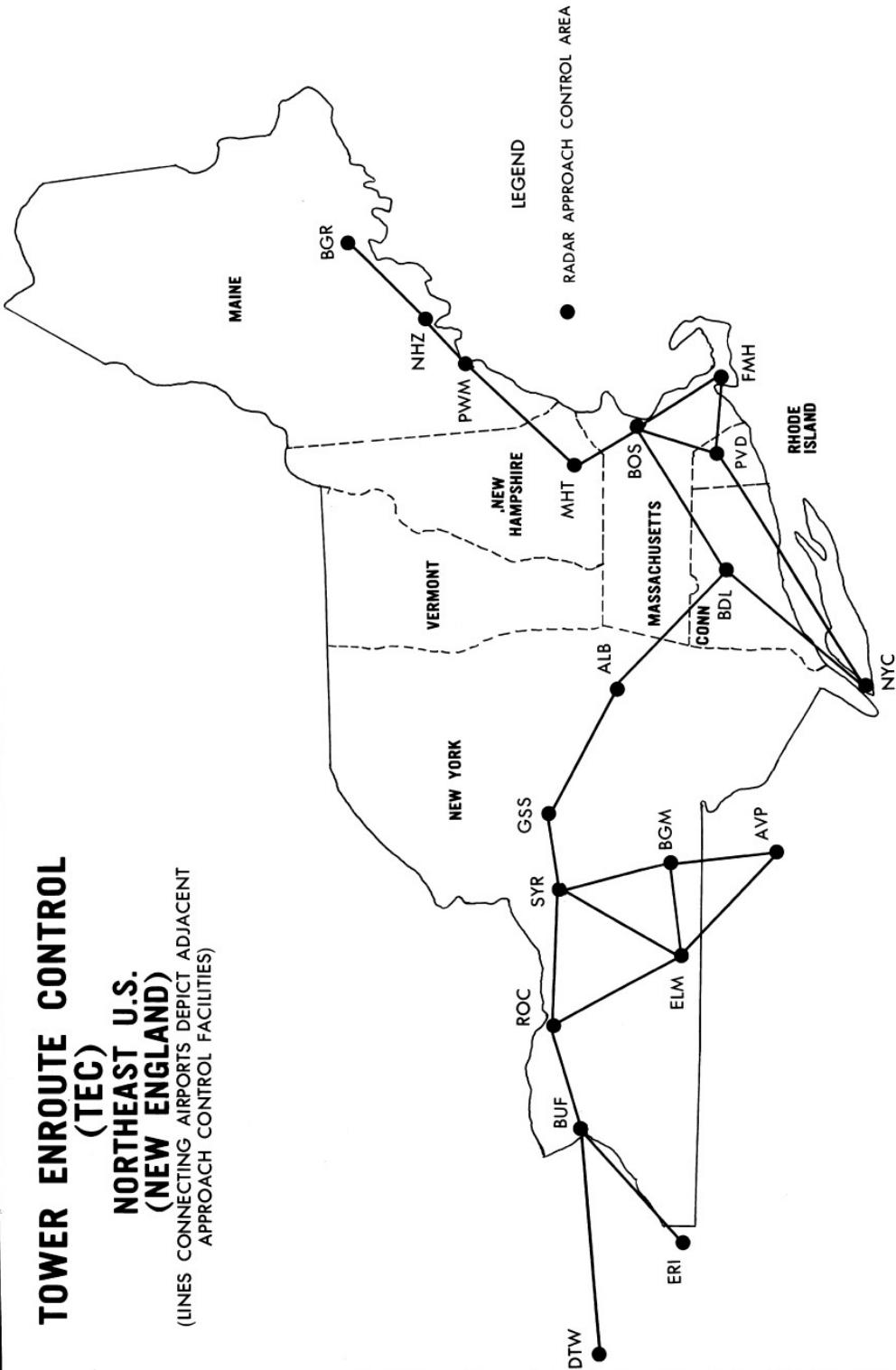
Route	Segment	DME
Q23	FORT SMITH-RAZORBACK	OKM, RZC, EOS, TUL
Q24	LAKE CHARLES-BATON ROUGE	AEX, DAS, LCH, MCB, LFT, BTR
Q25	BATON ROUGE-IRUBE	AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY
	IRUBE-PAYTN	GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI
	MEEOW-WALNUT RIDGE	ELD, MEM, LIT, FAM, RZC
	WALNUT RIDGE-WLSUN	MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH
Q26	WLSUN-POCKET CITY	BWG, PXV, ENL, BNA, TTH
Q27	WALNUT RIDGE-DEVAC	LIT, JKS, GQO, MEM, BNA, FAM, ARG, DYL, VUZ, RMG
Q28	FORT SMITH-ZALDA	OKM, SGF, RZC, EOS, TUL
	GRAZN-PYRMD	EIC, LIT, ELD, OKM, TXK
	PYRMD-HAKAT	ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK
	HAKAT-ESTEE	ARG, LIT, FAM, SGF, MEM
Q29	ESTEE-POCKET CITY	ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA
	HARES-MEMPHIS	MEM, ARG, LIT, JAN, ELD, SQS
	MEMPHIS-SIDAE	MEM, PXV, BNA, BWG, ARG, ENL
	SIDAE-POCKET CITY	PXV, TTH, BWG, ENL
Q30	SIDON-VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
Q31	DHART-JODOX	SQS, LIT, TXK
	JODOX-MARVELL	SQS, LIT, ELD, MEM, ARG
	MARVELL-TIID	ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH
	TIIDE-POCKET CITY	BWG, PXV, ENL, TTH
Q32	EL DORADO-GAGLE	AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK
	GAGLE-CRAMM	JAN, SQS, MEM, ARG, VUZ, BNA, LIT
	CRAMM-NASHVILLE	BWG, MEM, VUZ, BNA, GQO
Q33	NASHVILLE-SWAPP	BWG, IIU, PXV, VVX, BNA, GQO
	DHART-LITTLE ROCK	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS
Q34	LITTLE ROCK-PROWL	ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
	TEXARKANA-MATIE	LIT, SWB, TXK, BYP, EIC, ELD, SQS
	MATIE-MEMPHIS	LIT, ARG, MEM, ELD, SQS
	MEMPHIS-SWAPP	BWG, ARG, MEM, MKL, SQS, PXV, BNA, GQO, IIU, VVX
Q35	KIMBERLY-NEERO	LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO
	NEERO-WINEN	BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE
	WINEN-CORKR	CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK
	CORKR-DRAKE	TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD
Q36	RAZORBACK-TWITS	RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT
	TWITS-DEPEC	MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU
	DEPEC-NASHVILLE	GQO, BWG, BNA, PXV, IIU
Q38	NASHVILLE-SWAPP	VVX, BWG, BNA, GQO, PXV, IIU
	ROKIT-INCIN	DAS, LCH, SWB, IAH, LFK, HUB, AEX
	INCIN-LAREY	JAN, MCB, SWB, AEX
	LAREY-BESOM	JAN, JYU, MEI, SQS, VUZ
Q40	ALEXANDRIA-DOOMS	AEX, SWB, LCH, JAN, HEZ, MCB
	DOOMS-WINAP	JAN, SQS, MEI, MCB
	WINAP-MISLE	MEI, VUZ, JYU
Q42	KIRKSVILLE-STRUK	CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX
	STRUK-DANVILLE	ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK, OBK, GIJ, FWA, GSH, IRK
	DANVILLE-MUNCIE	GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM
	MUNCIE-HIDON	FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN, AIR, HVQ, CXR, EWC
	HIDON-BUBAA	AIR, APE, HNN, CXR, HVQ, EWC, DJB
	BUBAA-PSYKO	AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB
	PSYKO-BRNAN	PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT
	BRNAN-MAALS	EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE
	MAALS-SUZIE	ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK
	SUZIE-EAST TEXAS	JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN
	EAST TEXAS-ELIOT	HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK
	DEFUN-HEVNV	PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG
	HEVNV-PLYER	PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD
	PLYER-SWABE	PIE, ORL, OMN, SRQ, TAY
	SWABE-ST PETERSBURG	LAL, ORL, OMN, SRQ, PHK, PIE
	ST PETERSBURG-CYPRESS	PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN

Q-ROUTES**450**

Route	Segment	DME
Q106	SME LZ-BULZI BULZI-DRABK DRABK-GADAY	LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI
Q108	GADAY-HKUNA	MGM, PZD, OTK, JYU, SZW, CEW, SJI
Q110	THNDR-JAYMC JAYMC-RVERO RVERO-KPASA KPASA-BRUTS BRUTS-GULFR GULFR-FEONA	CEW, JYU, MGM, SZW, RRS, PZD, MAI, OTK, GEF, MGR, TAY, AMG, CRG SRQ, VRB, PHK, PIE, LAL, VKZ, ORL, PBI VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP OMN, PIE, PBI, SRQ, ORL, LAL SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM
Q112	DEFUN-HEVNN HEVNN-INPIN	PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG
Q116	KPASA-BRUTS BRUTS-GULFR	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK
Q118	GULFR-CEEYA KPASA-BRUTS BRUTS-LENIE	MCN, AMG, PZD, OTK, SZW, TAY SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN
Q501	VIXIS-GOPHER	ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT, EAU DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF
Q502	GOPHER-SOBME KENPA-GOPHER	FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW, MSP, MNM, ASP, TVC, GEP, RWF, BRD
Q504	GOPHER-SOBME NOTAP-CESNA	FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC, SAW, GRB, BRD
Q505	CESNA-HEMDI OMAGA-RIMBE RIMBE-CESNA CESNA-HEMDI	ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD SSM, TVC, ASP, SAW, GRB SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB

**TOWER ENROUTE CONTROL
(TEC)**
**NORTHEAST U.S.
(NEW ENGLAND)**

(LINES CONNECTING AIRPORTS DEPICT ADJACENT
APPROACH CONTROL FACILITIES)



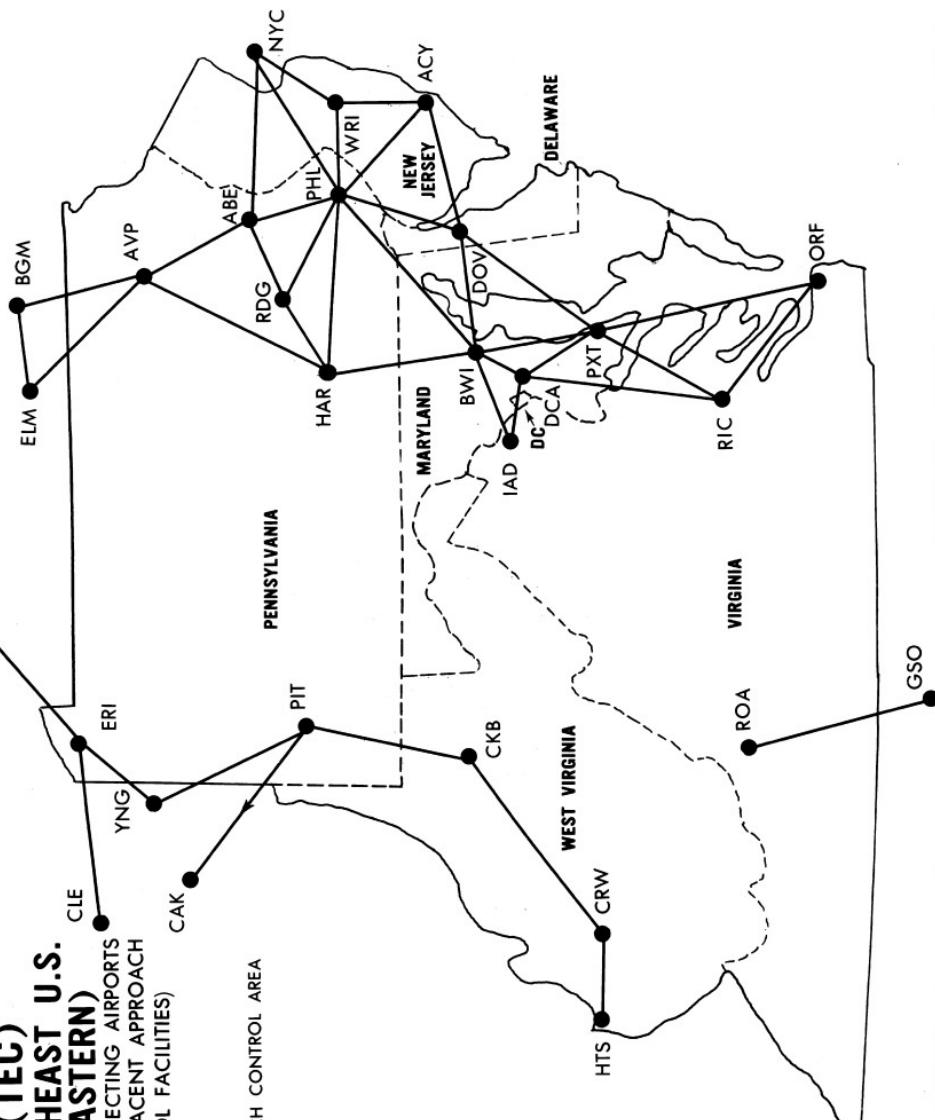
TOWER ENROUTE CONTROL (TEC)

NORTHEAST U.S. (EASTERN)

(LINES CONNECTING AIRPORTS
DEPICT ADJACENT APPROACH
CONTROL FACILITIES)

LEGEND

- RADAR APPROACH CONTROL AREA



TOWER ENROUTE CONTROL (TEC)

Within the national airspace system it is possible for a pilot to fly IFR from one point to another without leaving approach control airspace. This is referred to as "tower enroute" which allows flight beneath the enroute structure. The tower enroute concept has been expanded (where practical) by reallocating airspace vertically/geographically to allow flight planning between city pairs while remaining within approach control airspace. Pilots are encouraged to solicit tower enroute information from FSS's and to use the route descriptions provided in this directory when filing flight plans. Other airways which appear to be more direct between two points may take the aircraft out of approach control airspace thereby resulting in additional delays or other complications. All published TEC routes are designed to avoid enroute airspace and the majority are within radar coverage. Additional routes and other changes will appear in forthcoming editions as necessary. The acronym "TEC" should be included in the remarks section of the flight plan. This will advise ATC that the pilot intends to remain within approach control airspace for the entire flight. The following items should be noted before using the graphics and route descriptions:

1. The graphic is not to be used for navigation nor detailed flight planning. Not all city pairs are depicted. It is intended to show general geographic areas connected by tower enroute control. Pilots should refer to route descriptions for specific flight planning.

2. The route description contains four columns of information: i.e., the approach control area (listed alphabetically) within which the departure airport is located (check appropriate flight information publications), the specific route (airway, radial, etc.), the highest altitude allowed for the route, and the destination airport (listed alphabetically). Be advised, many destination airports are associated with a larger primary airport. Check the legend preceding this listing for this association.

3. The word "DIRECT" will appear as the route when radar vectors will be used or no airway exists. Also, this indicates that a Standard Instrument Departure (SID) or Standard Terminal Arrival Route (STAR) may be applied by ATC.

4. When a NAVAID or intersection identifier appears with no airway immediately preceding or following the identifier, the routing is understood to be DIRECT to or from that point unless otherwise cleared by ATC.

5. Routes beginning or ending with an airway indicate that the airway essentially overflies the airport or radar vectors will be applied.

6. Where more than one route is listed to the same destination, the pilot may select which route is desired. Unless otherwise stated, all routes may be flown in either direction.

7. Routes are effective only during each respective terminal facility's normal operating hours. Pilots are cautioned to check NOTAMS to ensure appropriate terminal facilities will be operating for the planned flight time.

8. All identifiers used for NAVAIDS, airports, and intersections are official identifiers.

9. Altitudes are listed in thousands of feet. ATC may require altitude changes to maintain flight within approach control airspace. ATC will provide radar monitoring and, if necessary, course guidance if the highest altitude assigned by ATC is below the Minimum Enroute Altitude (MEA).

10. Although all airports are not listed under the destination column, IFR flight may be planned to satellite airports in proximity to major airports via the same routing.

11. Flight plans should be filed with a Flight Service Station (FSS).

TOWER ENROUTE CONTROL CITY PAIRS

(1) Single Engine only.

(2) Props less than 210 KT IAS.

(3) Props less than 250 KT IAS.

(4) Jets and Props greater than 210 KT IAS.

(5) Jets and Props greater than 250 KTS IAS.

Boston—NO SATS = BED/LWM/BVY/FIT/6B6/2B2

SO SATS = BOS/OWD/1B9/3B2

Bradley = BDL/BAF/CEF/7B2

Bradley/Hartford = HFD/MMK/IJD/4B8

Bradley/Worcester = ORH/3B0/1B6

Manchester = MHT/ASH/CON/LCI

Manchester/Pease = PSM/DAW/3B4

New York/Bridgeport = BDR/HVN/OXC/3B9

Philadelphia = NO SATS = OQN/MQS/LOM/DYL/PNE/CKZ/PTW/UKT/TTN/NXX

SO SATS = ILG/EVY

Portland = PWM/IWI/NHZ/RKD

Portland/Augusta = AUG/LEW/WVL/IZG/81B

Providence = PVD/EWB/TAN/SFZ/UUU/5B3

Providence/Groton = GON/WST/BID/0B8

Approach Control Area

(Including Satellites)

Route

Highest Altitude

Destination

Approach Control Area (Including Satellites)	Route	Highest Altitude	Destination
Albany	ALB GDM V431 LOBBY	10000	Bedford
	V14 V428 V29	6000	Binghamton
	ALB GDM V431 REVER	10000	Boston
	Direct	10000	Bradley
	V130	10000	Bradley
	ALB V44 DENNA	10000	Bridgeport
	V14	10000	Buffalo
	(3) ALB V123 HAARP	10000	Danbury

**Approach Control Area
(Including Satellites)**

		Highest Altitude	Destination
	Route		
.....	(4) ALB V157 HAARP	10000	Danbury
.....	V14 V428	8000	Elmira
.....	V2	10000	Griiffiss
.....	ALB V130 BDL GON	10000	Groton
.....	Direct	10000	Hartford
.....	ALB CTR PVD V151 GAILS	10000	Hyannis
.....	V14 V428	8000	Ithaca
.....	ALB EEN MHT	10000	Manchester
.....	ALB CTR V405 PVD	10000	Marthas Vine
.....	ALB CTR PVD PVD167 NEWBE DEEPO	10000	Nantucket
.....	ALB GDM V431 LOBBY	10000	Norwood
.....	ALB CAM CON	10000	Portland
.....	ALB CON	10000	Portsmouth
.....	ALB CTR PVD	10000	Providence
.....	ALB CTR PVD V151 GAILS	10000	Provincetown
.....	V2	10000	Rochester
.....	V14 BEEPS	10000	Rochester
.....	ALB V123 TRESA	10000	Stewart
.....	ALB V130 MOLDS	10000	Worcester
Allentown			
.....	FJC V149 LHY	8000	Albany
.....	ETX LHY	8000	Albany
.....	V149 MAZIE ARD CYN	5000	Atlantic City
.....	V93 LRP	8000	Baltimore
.....	ETX V162 DUMMR V93 LRP	6000	Baltimore
.....	V39 LRP	8000	Baltimore
.....	V130	10000	Bradley
.....	Direct	10000	Bradley
.....	FJC STW	5000	Caldwell
.....	(2) ETX V30 SBJ	5000	Farmingdale
.....	ETX V162 HAR	8000	Harrisburg
.....	Direct	10000	Hartford
.....	ETX ETX004 WEISS	4000	Hazleton
.....	ETX V39	4000	Lancaster
.....	(2) ETX BWZ	5000	Newark
.....	(4) FJC BWZ	6000	Newark
.....	FJC V149 MAZIE ARD	5000	North Philadel
.....	(2) ETX V29 PTW (piston only)	4000	Philadelphia
.....	(4) FJC V149 MAIZE (turbojet only)	7000	Philadelphia
.....	ETX V29 PTW (turboprop only)	5000	Philadelphia
.....	FJC V6 SEG	8000	Pittsburgh
.....	ETX V30 SEG	8000	Pittsburgh
.....	V276 RAV	8000	Pittsburgh
.....	FJC RAV	8000	Pittsburgh
.....	ETX V39 FLOAT	4000	Reading
.....	ETX V164 FQM	6000	Rochester
.....	FJC V162 HUO	5000	Westchester
.....	V93 LVZ	7000	Wilkes-Barre
.....	FJC V149 RITTY	7000	Wilkes-Barre
.....	ETX V29 PTW	4000	Wilmington
Atlantic City			
.....	V229 DIXIE V276 ARD	5000	Allentown
.....	V1 DIXIE V276 ARD (Single Engine only)	5000	Allentown
.....	V1 ATR V308 OTT	4000	Andrews AFB
.....	LEEAH V268 BAL	4000	Baltimore
.....	V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Bangor
.....	V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Bar Harbor
.....	V1 JFK V229 HFD HFD053 DREEM (Single Engine only)	5000	Boston (Nort
.....	V1 JFK V229 HFD V3 WOONS (Single Engine only)	5000	Boston
.....	V1 JFK V229 HFD FOSTY WOONS (Single engine and /E, /F, /G only)	5000	Boston
.....	V1 JFK V229 BDR BDR014 JUDDS (Single Engine only)	5000	Bradley
.....	V184 ZIGGI JFK 210 JFK V229 BDR (Twins only, n/a between 1400-2100)	5000	Bridgeport
.....	HOWIE V1 JFK V229 BDR (Single engine only)	5000	Bridgeport
.....	V184 OOD DQO V469 HAR	4000	Capital City

TOWER ENROUTE CONTROL

Approach Control Area
Including Satellites)

Route	Highest Altitude	Destination
..... LEEAH V268 ENO	4000	Dover
..... LEEAH V268 BAL BAL294 KROLL AML (No jets)	4000	Dulles
..... LEEAH V229 PXT V16 V286 CSN (Jets only)	4000	Dulles
..... V268 ENO V29 AVP V147	4000	Elmira
..... V1 JFK BDR MAD MAD126 MONDI (Single Engine only)	5000	Groton
..... V184 OOD DQO V469	4000	Harrisburg
..... V1 JFK V229 (Single engine only)	5000	Hartford
..... V1 JFK V229 HFD V167 PVD V151 GAILS (Single Engine only)	5000	Hyannis
..... V1 JFK CCC (Single Engine only)	5000	Islip
..... V184 ZIGGI JFK210 JFK CCC (No Single Engine; n/a btn 1400-2100 local)	5000	Islip
..... V1 JFK (Single Engine only)	5000	Kennedy
..... V184 ZIGGI JFK210 JFK (Jets/multiengine Props only; no OTFC)	5000	Kennedy
..... V1 DIXIE V276 RBV V123 NANCI (Single Engine only)	5000	LaGuardia
..... V229 DIXIE V276 RBV V123 NANCI (No Single Engine)	5000	LaGuardia
..... V229 DIXIE V276 RBV V123 NANCI (Jets only)	7000	LaGuardia
..... V184 OOD DQO DQ0319 LRP144 LRP	4000	Lancaster
..... HOWIE V1 CYN	5000	McGuire AFB
..... VCN V16 CYN	7000	McGuire AFB
..... V229 PANZE (Helicopters only)	3000	McGuire AFB
..... SIE V44 PANZE	5000	McGuire AFB
..... SIE V139 HARBO	5000	McGuire AFB
..... V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Manchester
..... V1 JFK V229 BDR MAD (Single Engine only)	5000	Meriden
..... V1 JFK V229 BDR MAD V475 V188 GON V374 (Single engine only)	5000	Markham
..... V1 JFK V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine only)	5000	Nantucket
..... V229 DIXIE V276 RBV RBV005 OWBIE (Non-jets only)	5000	Newark
..... V229 DIXIE V276 RBV V249 METRO	5000	Newark
..... V229 DIXIE V276 RBV RBV005 OWBIE (Jets only)	6000	Newark
..... V1 JFK V229 BDR MAD V475 V188 GON V374 MINNK (Single Engine only)	5000	New Bedford
..... V229 DIXIE V276 ARD	5000	North Philadelphia
..... ACY V184 OOD	4000	Philadelphia
..... V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Portland
..... V1 JFK V229 BDR MAD V475 V188 GON (Single Engine only)	5000	Providence
..... V1 JFK V229 HFD V167 PVD V151 GAILS (Single Engine only)	5000	Provincetown
..... V1 JFK V229 BDR MAD V475 V188 GON (Single Engine only)	5000	Quonset
..... V184 OOD DQO MXE MXE334 HUMEL	4000	Reading
..... V1 SBY	6000	Salisbury
..... SIE V139	4000	Snow Hill
..... V1 ATR	6000	Snow Hill
..... V1 JFK V229 BDR MAD V475 V188 GON V374 MINNK (Single Engine only)	5000	Taunton Muni
..... V229 PANZE V184 ZIGGI V276 RBV V249 METRO (Turbojet only)	4000	Teterboro
..... LEEAH V1 ATR V308 OTT (Props only)	4000	Washington
..... V229 DIXIE V276 RBV V249 SAX V39 BREZY (Multi-engine Props only)	5000	Westchester Co.
..... V1 DIXIE V276 RBV V249 SAX V39 BREZY (Multi-engine props only)	5000	Westchester Co.
..... V1 JFK V229 HFD V1 GRAYM (Single Engine only)	5000	Worcester

**Approach Control Area
(Including Satellites)**

	Route	Highest Altitude	Destination
Baltimore	V93 LRP V39 ETX	7000	Allentown
	V268 LEEAH V229	7000	Atlantic City
	V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Bangor
	V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Bar Harbor
	V93 LRP V499	7000	Binghamton
	V268 ENO V16 JFK V229 HFD HFD053 DREEM (Single engine only)	7000	Boston (Nort
	V268 ENO V16 JFK V229 HFD V3 WOONS (Single Engine only)	7000	Boston
	V268 ENO V16 JFK V229 HFD FOSTY WOONS (Single engine and /E, /F, /G only)	7000	Boston
	V268 ENO V16 JFK V229 BDR BDR014 JUDDS (Single Engine only)	7000	Bradley
	V268 ENO V16 JFK V229 BDR (Single Engine only)	7000	Bridgeport
	V31 HAR	7000	Capital City
	V268 ENO	7000	Dover AFB
	V44 MRB	6000	Dulles
	V268 ENO V16 JFK V229 BDR MAD MAD126 MONDI (Single Engine only)	7000	Groton
	EMI EMI321 HGR089 HGR	6000	Hagerstown
	V31 HAR	7000	Harrisburg
	V268 ENO V16 JFK	7000	IIslip
	V268 ENO V16 JFK (Single Engine)	7000	Kennedy
	V214 DQ0 V479 RUUTH V123 NANCI	7000	LaGuardia
	V499 LRP	5000	Lancaster
	V214 DQ0 OOD V312 CYN GXU	5000	McGuire
	V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Manchester
	V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V374 MVY (Single Engine only)	7000	Martha's Vin
	V214 MRB	8000	Martinsburg
	V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine only)	7000	Nantucket
	BAL V378 MXE ARD V214 METRO (-180 kts only)	5000	Newark
SO SATS	V214 DQ0	7000	New Castle
	V93 PXT V16 V33 V286 STEIN	6000	Norfolk
	V419 MXE (Non turbojets only)	5000	N. Philadelphia
	V378 MXE (Non turbojets only)	5000	N. Philadelphia
NO SATS	V214 DQ0 (Turbojets only)	11000	N. Philadelphia
	V93 PXT	6000	Patuxent River
	V214 ODESA OOD (Non turbojets only)	7000	Philadelphia
	V214 DQ0 (Turbojets only)	9000	Philadelphia
	V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Portland
	V93 PXT V16	6000	Richmond
	BAL BAL133 SBY332 SBY	7000	Salisbury
	V268 ENO V16 JFK CCC (Single Engine)	7000	Suffolk
	BAL V378 MXE V3 SBJ TEB (-180 kts only)	7000	Teterboro
	DIRECT	4000	Washington
Bangor	V93 LRP V39 V162 FJC STW SAX V39 BREZY	7000	Westchester
	V93 LRP ETX FJC BWZ SAX V39 BREZY	7000	Westchester
	V93 LVZ	7000	Wilkes Barre
	ENE LWM	10000	Bedford
	(3) ENE PSM PSM221 STEVO LWM	10000	Boston
	(4) ENE V167 SCUPP	10000	Boston
	ENE V106 GDM V229 WITNY	10000	Bradley
	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
	ENE V106 GDM V229 HFD	10000	Bridgeport
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
	AUG V39 CON	10000	Concord
	(3) AUG V39 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)

	Route	Highest Altitude	Destination
	AUG V39 GDM V14 ORW GON	10000	Groton
	AUG V39 GDM V229 HFD	10000	Hartford
	CLOWW WITNY HFD (/E., /F., /G only)	10000	Hartford
	ENE V139 TONNI	10000	Hyannis
	ENE V106 GDM V14 ORW V16 CCC	10000	Islip
	ENE V106 GDM V14 ORW V16 DPK	10000	Kennedy
	ENE MHT	10000	Manchester
	ENE V139 TONNI	10000	Marthas Vineyard
	ENE V139 TONNI	10000	Nantucket
	(3) CLOWW WITNY HFD V3 CMK V623 SAX (/E., /F., /G only)	10000	Newark & SATS
	(3) ENE V106 GDM V3 CMK V188 SAX	10000	Newark & SATS
	(1) CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E., /F., /G only)	10000	Newark & SATS
	(1) ENE V106 GDM V229 SEALL V188 SAX	10000	Newark & SATS
	ENE LWM	10000	Norwood
	ENE V139 BURDY	10000	Providence
	ENE V139 TONNI	10000	Provincetown
	AUG V39 CON V93 STUBY V205 TRESA	10000	Stewart
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E., /F., /G only)	10000	White Plains
	ENE V106 GDM V229 SPENO	10000	Worcester
Binghamton	V29 LVZ V613	8000	Allentown
	V252 GEE V14	8000	Buffalo
	V270	8000	Elmira
	V423	8000	Ithaca
	V29 LVZ V613 FJC ARD	8000	N. Philadelphia
	V29 PTW	8000	Philadelphia
	V423 ITH	8000	Rochester
	V29	8000	Syracuse
	V29 LVZ V226 MUGZY	8000	Teterboro
	V29	8000	Wilkes-Barre
Boston	GLYDE V270 CTR	10000	Albany
NO SATS	(1) V419 V14 ORW V16 JFK V229	10000	Atlantic City
SO SATS	(1) V268 HTO CCC V16 V229	10000	Atlantic City
NO SATS	V419 V14 ORW V308 BRIGS	10000	Atlantic City
SO SATS	V268 BRIGS	10000	Atlantic City
NO SATS	PSM ENE	10000	Augusta
SO SATS	(1) V419 V14 ORW V16 V44 V268	10000	Baltimore
NO SATS	(1) V268 HTO CCC V16 V44 V268	10000	Baltimore
SO SATS	V419 V14 ORW HTO V268	10000	Baltimore
	V268	10000	Baltimore
	PSM ENE BGR	10000	Bangor
	PSM ENE	10000	Bar Harbor
	BOSOX V419 WITNY	10000	Bradley
NO SATS	BOSOX V1 HFD	10000	Bridgeport
SO SATS	V268 SEY V34 CREAM	10000	Bridgeport
	V270 CTR V146 V14	10000	Buffalo
	MHT V141	10000	Burlington
	MHT CON	10000	Concord
	(3) BOSOX V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(5) GLYDE BAF IGN V157 HAARP	10000	Danbury
NO SATS	(1) V419 V14 ORW V16 ENO	10000	Dover AFB
SO SATS	(1) V268 HTO CCC V16 ENO	10000	Dover AFB
NO SATS	V419 V14 ORW HTO V268 ENO	10000	Dover AFB
SO SATS	V268 ENO	10000	Dover AFB
	GLYDE V270	10000	Elmira
	GLYDE V270	10000	Erie
	PVD	10000	Groton
NO SATS	BOSOX V1 HFD	10000	Hartford
	DRUNK V141 GAILS	10000	Hyannis
NO SATS	V419 V14 ORW V16 CCC	10000	Islip
SO SATS	V268 HTO V46 CCC	10000	Islip
	MHT	10000	Keene
NO SATS	V419 V14 ORW V16 DPK	10000	Kennedy
SO SATS	V268 HTO V46 DPK	10000	Kennedy
	(3) BOSOX V1 MAD V475	10000	LaGuardia

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

			Highest Altitude	Destination
NO SATS	..... MHT		10000	Lebanon
SO SATS	..... MHT		10000	Manchester
NO SATS	..... MVY359035 MVY		10000	Martha's Vineyard
SO SATS	..... (1) V419 V14 ORW V16 CYN		10000	McGuire AFB
NO SATS	..... (1) V268 HTO CCC V16 CYN		10000	McGuire AFB
SO SATS	..... V419 V14 ORW V308 DRIFT V312 CYN		10000	McGuire AFB
NO SATS	..... V268 DRIFT V312 CYN		10000	McGuire AFB
SO SATS	..... DRUNK V141		10000	Nantucket
	..... (1) BOSOX V1 HFD V229 SEALL V188 CMK		10000	Newark & SATS
	..... V623 SAX			
NO SATS	..... (3) BOSOX V1 HFD V3 CMK V623 SAX		10000	Newark & SATS
SO SATS	..... BOSOX V1 HFD		10000	New Haven
NO SATS	..... V268 SEY V34 CREAM		10000	New Haven
SO SATS	..... (1) V419 V14 ORW V16 DIXIE V276 ARD		10000	N.E. Philadelphia
NO SATS	..... (1) V268 HTO CCC V16 DIXIE V276 ARD		10000	N.E. Philadelphia
SO SATS	..... V419 V14 ORW V308 MANTA V276 ARD		10000	N.E. Philadelphia
NO SATS	..... V268 MANTA V276 ARD		10000	N.E. Philadelphia
SO SATS	..... (1) V419 V14 ORW V16 VCN OOD		10000	Philadelphia
NO SATS	..... (1) V268 HTO CCC V16 VCN OOD		10000	Philadelphia
NO SATS	..... V419 V14 ORW V308 BRIGS ACY V184 OOD		10000	Philadelphia
SO SATS	..... V268 BRIGS ACY V184 OOD		10000	Philadelphia
	..... PSM ENE		10000	Portland
	..... Direct		10000	Portsmouth
	..... Direct		10000	Providence
	..... Direct		10000	Provincetown
NO SATS	..... (1) V419 V14 ORW V16		10000	Richmond
SO SATS	..... (1) V268 HTO CCC V16		10000	Richmond
NO SATS	..... V419 V14 ORW HTO V268 ENO V16		10000	Richmond
SO SATS	..... V268 ENO V16		10000	Richmond
	..... BOSOX V419 BDL V205 TRESA		10000	Stewart
	..... MHT V490 UCA		10000	Syracuse
NO SATS	..... (1) V419 V14 ORW V16 DIXIE V276 RBV		10000	Trenton
SO SATS	..... (1) V268 HTO CCC V16 DIXIE V276 RBV		10000	Trenton
NO SATS	..... V419 V14 ORW V308 MANTA V276 RBV		10000	Trenton
SO SATS	..... V268 MANTA V276 RBV		10000	Trenton
	..... (3) BOSOX V1 MAD V475 BDR BDR288		10000	White Plains
	..... RYMES			
NO SATS	..... V419 V14 ORW V16 CREAM HTO		10000	Westhampton Bch
NO SATS	..... V268 HTO		10000	Westhampton Bch
	..... Direct		10000	Worcester
Boston ARTCC/Keene	..... GDM V431 LOBBY		10000	Bedford
	..... V431 REVER		10000	Boston
	..... Direct		10000	Bradley
	..... GDM V229 HFD		10000	Bridgeport
	..... (3) GDM V229 HFD V1 MAD V475 BDR BDR288		10000	Danbury
	..... RYMES			
	..... GDM V14 ORW GON		10000	Groton
	..... GDM V229 HFD		10000	Hartford
	..... GDM V151 GAILS		10000	Hyannis
	..... GDM V151 PVD V405 MVY		10000	Marthas Vineyard
	..... GDM V151 PVD PVD167 NEWBE DEEPO		10000	Nantucket
	..... GDM V431 LOBBY		10000	Norwood
	..... GDM V151 PVD		10000	Providence
	..... GDM V151 GAILS		10000	Provincetown
	..... CTR V93 STUBY V205 TRESA		10000	Stewart
	..... GDM V229 SPENO		10000	Worcester
Boston ARTCC/Lebanon	..... LEB LEB167 BASUU (BED/FIT/6B6) or V141		10000	Bedford
	CON LWM (BVY/LWM/2B2)			
	..... V141 CON CON135 TOMIE LWM		10000	Boston
	..... EEN		10000	Bradley
	..... V151 GDM V229 HFD		10000	Bridgeport
	..... V151 GDM V229 HFD V1 MAD V475 BDR		10000	Danbury
	..... BDR288 RYMES			
	..... V151 GDM V14 ORW GON		10000	Groton
	..... V151 GDM V229 HFD		10000	Hartford
	..... V141 CON LWM BOS GAILS		10000	Hyannis
	..... V141 CON LWM BOS		10000	Marthas Vineyard
	..... V141 CON LWM BOS LFV		10000	Nantucket
 LEB LEB167 BASUU		10000	Norwood
 V151 PVD		10000	Providence

TOWER ENROUTE CONTROL

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Approach Control Area
(Including Satellites)

	Route	Highest Altitude	Destination
	V141 CON LWM BOS	10000	Provincetown
	V151 GDM V229 SPENO	10000	Worcester
Bradley	DIRECT	10000	Albany
	PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
	(1) GON CCC V16 JFK V229	10000	Atlantic City
	GON HTO V308 BRIGS	10000	Atlantic City
	EEN V93 CON	10000	Augusta
	(1) GON CCC V16 ENO V268	10000	Baltimore
	GON HTO V268	10000	Baltimore
	EEN V93 CON V39 AUG	10000	Bangor
	EEN V93 ENE	10000	Bar Harbor
	GRAYM HFD053 DREEM	10000	Bedford & NO SATS
	PUT PUT 105 WOONS	10000	Boston & SO SATS
	HFD	10000	Bridgeport
	ALB V14	10000	Buffalo
	EEN V93 CON	10000	Concord
	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(5) V405 VEERS IGN V157 HAARP	10000	Danbury
	(1) GON CCC V16 ENO	10000	Dover AFB
	GON HTO V268 ENO	10000	Dover AFB
	CTR V270	10000	Elmira
	CTR V270	10000	Erie
	HFD GON	10000	Groton
	PVD V151 GAILS	10000	Hyannis
	GON CCC	10000	Islip
	DIRECT	10000	Keene
	GON CCC V16 DPK	10000	Kennedy
	(3) HFD V1 MAD V475	10000	LaGuardia
	EEN V151	10000	Lebanon
	EEN	10000	Manchester
	PVD V405 MVY	10000	Marthas Vineyard
	(1) GON CCC V16 CYN	10000	McGuire AFB
	GON HTO V308 DRIFT V312 CYN	10000	McGuire AFB
	PVD PVD167 NEWBE DEEPO	10000	Nantucket
	(1) HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	(3) HFD V3 CMK V623 SAX	10000	Newark & SATS
	(1) GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
	GON HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
	PUT PUT105 WOONS	10000	Norwood
	(1) GON CCC V16 VCN OOD	10000	Philadelphia
	GON HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
	EEN	10000	Portland
	(3) VAPER V39 GDM V106 RAYMY	10000	Portsmouth
	(5) EEN	10000	Portsmouth
	DIRECT	10000	Providence
	PVD V151 GAILS	10000	Provincetown
	(1) GON CCC V16	10000	Richmond
	GON HTO V268 ENO V16	10000	Richmond
	ALB	10000	Rochester
	VEERS V205 TRESA	10000	Stewart
	ALB	10000	Syracuse
	(1) GON CCC V16 DIXIE V276 RBV	10000	Trenton
	GON HTO V308 MANTA V276 RBV	10000	Trenton
	GON HTO	10000	Westhampton Beach
	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
	PWL V106 LHY	5000	Wilkes-Barre
Bradley/Hartford	DIRECT	10000	Albany
	PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
	(1) GON CCC V16 JFK V229	10000	Atlantic City
	GON HTO V308 BRIGS	10000	Atlantic City
	HFD V229 GDM V39 CON	10000	Augusta
	HFD CLOWW (/E, /F, /G only)	10000	Augusta
	(1) GON CCC V16 ENO V268	10000	Baltimore
	GON HTO V268	10000	Baltimore
	HFD V229 GDM V39 AUG	10000	Bangor
	HFD CLOWW (/E, /F, /G only)	10000	Bangor
	HFD V229 GDM V106 ENE	10000	Bar Harbor
	HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	HFD HFD053 DREEM	10000	Bedford & NO SATS

**Approach Control Area
(Including Satellites)**

	Route	Highest Altitude	Destination
	HFD V3 WOONS	10000	Boston & SO SATS
	DIRECT	10000	Bridgeport
	ALB V14	10000	Buffalo
	HFD V229 GDM V39 CON	10000	Concord
	HFD CLOWW (/E, /F, /G only)	10000	Concord
	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(5) BDL V405 VEERS IGN V157 HAARP	10000	Danbury
	(1) GON CCC V16 ENO	10000	Dover AFB
	GON HTO V268 ENO	10000	Dover AFB
	CTR V270	10000	Elmira
	CTR V270	10000	Erie
	HFD GON	10000	Groton
	HFD V167 PVD V151 GAILS	10000	Hyannis
	GON CCC	10000	IIslip
	HFD V229 GDM	10000	Keene
	GON CCC V16 DPK	10000	Kennedy
	(3) HFD V1 MAD V475	10000	LaGuardia
	HFD V229 GDM V151	10000	Lebanon
	HFD V229 GDM V106 MHT	10000	Manchester
	HFD CLOWW (/E, /F, /G only)	10000	Manchester
	GON V374 MVY	10000	Marthas Vineyard
	(1) GON CCC V16 CYN	10000	McGuire AFB
	GON HTO V308 DRIFT V312 CYN	10000	McGuire AFB
	GON V58 NEWBE DEEPO	10000	Nantucket
	(1) HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	(3) HFD V3 CMK V623 SAX	10000	Newark & SATS
	(1) GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
	GON HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
	PUT PUT105 WOONS	10000	Norwood
	(1) GON CCC V16 VCN OOD	10000	Philadelphia
	GON HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
	HFD V229 GDM V106 ENE	10000	Portland
	HFD CLOWW (/E, /F, /G only)	10000	Portland
	HFD V229 GDM V106 RAYMY	10000	Portsmouth
	HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
	HFD V167 PVD	10000	Providence
	PVD V151 GAILS	10000	Provincetown
	(1) GON CCC V16	10000	Richmond
	GON HTO V268 ENO V16	10000	Richmond
	ALB	10000	Rochester
	VEERS V205 TRESA	10000	Stewart
	ALB	10000	Syracuse
	(1) GON CCC V16 DIXIE V276 RBV	10000	Trenton
	GON HTO V308 MANTA V276 RBV	10000	Trenton
	GON HTO	10000	Westhampton Beach
	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
	PWL V106 LHY	5000	Wilkes-Barre

Bradley/Worcester

.....	CTR	10000	Albany
.....	PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
.....	(1) ORW V16 JFK V229	10000	Atlantic City
.....	ORW HTO V308 BRIGS	10000	Atlantic City
.....	GDM V93 CON	10000	Augusta
.....	(1) ORW V16 ENO V268	10000	Baltimore
.....	ORW HTO V268	10000	Baltimore
.....	GDM V39 AUG	10000	Bangor
.....	GDM V106 ENE	10000	Bar Harbor
.....	DREEM	10000	Bedford & NO SATS
.....	PUT PUT105 WOONS	10000	Boston & SO SATS
.....	HFD	10000	Bridgeport
.....	CTR ALB V14	10000	Buffalo
.....	GDM	10000	Concord
.....	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
.....	(5) BAF IGN V157 HAARP	10000	Danbury
.....	(1) ORW V16 ENO	10000	Dover AFB
.....	ORW HTO V268 ENO	10000	Dover AFB
.....	CTR V270	10000	Elmira
.....	CTR V270	10000	Erie
.....	ORW GON	10000	Groton
.....	PUT V151 GAILS	10000	Hyannis
.....	ORW V16 CCC	10000	IIslip

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)

	Route	Highest Altitude	Destination
.....	GDM	10000	Keene
.....	ORW V16 DPK	10000	Kennedy
.....	(3) HFD V1 MAD V475	10000	LaGuardia
.....	GDM V151	10000	Lebanon
.....	GDM V106 MHT	10000	Manchester
.....	PUT V151 PVD V405 MVY	10000	Marthas Vineyard
.....	(1) ORW V16 CYN	10000	McGuire AFB
.....	ORW V308 DRIFT V312 CYN	10000	McGuire AFB
.....	PUT V151 PVD PVD167 NEWBE DEEPO	10000	Nantucket
.....	(1) HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
.....	(3) HFD V3 CMK V623 SAX	10000	Newark & SATS
.....	(1) ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
.....	ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
.....	PUT PUT105 WOONS	10000	Norwood
.....	(1) ORW V16 VCN OOD	10000	Philadelphia
.....	ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
.....	GDM V106 ENE	10000	Portland
.....	GDM V106 RAYMY	10000	Portsmouth
.....	PUT PVD	10000	Providence
.....	PUT V151 GAILS	10000	Provincetown
.....	(1) ORW V16	10000	Richmond
.....	ORW HTO V268 ENO V16	10000	Richmond
.....	CTR ALB	10000	Rochester
.....	VEERS V205 TRESA	10000	Stewart
.....	CTR ALB	10000	Syracuse
.....	(1) ORW V16 DIXIE V276 RBV	10000	Trenton
.....	ORW V308 MANTA V276 RBV	10000	Trenton
.....	ORW HTO	10000	Westhampton Beach
.....	(3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
.....	PWL V106 LHY	5000	Wilkes-Barre

Bridgeport (See New York/Bridgeport)

Buffalo	..... V2	10000	Detroit
	..... V14	10000	Erie
	..... V115	10000	Jamestown
	..... V2	10000	Rochester
Burlington	..... CAM	10000	Albany
	..... V141 LEB LEB167 BASUU	10000	Bedford
	..... V141 CON LWM	10000	Beverly
	..... (3) V141 CON TOMIE LWM	10000	Boston
	..... EEN	10000	Bradley
	..... ALB V44 DENNA	10000	Bridgeport
	..... (3) ALB V123 HAARP	10000	Danbury
	..... (4) ALB V157 HAARP	10000	Danbury
	..... V229 GDM V14 ORW GON	10000	Groton
	..... V229 HFD	10000	Hartford
	..... V141 CON LWM BOS GAILS	10000	Hyannis
	..... V141 CON LWM BOS	10000	Marthas Vineyard
	..... V141 CON LWM BOS LFV	10000	Nantucket
	..... V229 SPENO	10000	Norwich
	..... V141 LEB LEB167 BASUU	10000	Norwood
	..... V229 GDM V151 PVD	10000	Providence
	..... V141 CON LWM BOS	10000	Provincetown
	..... ALB V123 TRESA	10000	Stewart
Cape/Hyannis	..... PVD V146	10000	Albany
	..... MVY MVY230 V34 SEY HTO V308 BRIGS	10000	Atlantic City
	..... (1) MINNK V374 GON CCC V16 JFK V229	10000	Atlantic City
	..... FREDO BOS PSM ENE	10000	Augusta
	..... MVY MVY230 V34 SEY HTO V268	10000	Baltimore
	..... (1) MINNK V374 GON CCC V16 ENO V268	10000	Baltimore
	..... FREDO BOS PSM ENE BGR	10000	Bangor
	..... FREDO BOS PSM ENE	10000	Bar Harbor
	..... FREDO	10000	Bedford
	..... FREDO	10000	Boston & Sats
	..... PVD V405 BDL	10000	Bradley
	..... (water) MVY MVY230 V34 SEY HTO HT0302	10000	Bridgeport
	..... KEYED		

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

		Highest Altitude	Destination
.....	(land) MINNK V374 CREAM	10000	Bridgeport
.....	PVD V146 ALB V14	10000	Buffalo
.....	PVD V151 GDM V229	10000	Burlington
.....	FREDO BOS MHT CON	10000	Concord
.....	(3) PVD HFD V1 MAD V475 BDR BDR288	10000	Danbury
	RYMES		
.....	(5) PVD V146 BAF V157 HAARP	10000	Danbury
.....	MVY MVY230 V34 SEY HTO V268 ENO	10000	Dover AFB
.....	(1) MINNK V374 GON CCC V16 ENO	10000	Dover AFB
.....	PVD V146 CTR V270	10000	Elmira
.....	PVD V146 CTR V270	10000	Erie
.....	(5) MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Farmingdale
.....	(1) MINNK V374 GON CCC V16 DPK	10000	Farmingdale
.....	Direct	10000	Groton
.....	PVD HFD	10000	Hartford
.....	(5) MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Islip
.....	(1) MINNK V374 GON CCC	10000	Islip
.....	PVD V151 GDM	10000	Keene
.....	(5) MVY MVY230 V34 SEY HTO V46 DPK	10000	Kennedy
.....	(1) MINNK V374 GON CCC V16 DPK	10000	Kennedy
.....	PVD V167 HFD VI MAD V475	10000	LaGuardia
.....	PVD V151	10000	Lebanon
.....	FREDO BOS	10000	Manchester
.....	MVY MVY230 V34 SEY HTO V308 DRIFT V312	10000	McGuire AFB
	CYN		
.....	(1) MINNK V374 GON CCC V16 CYN	10000	McGuire AFB
.....	(1) PVD V167 HFD V229 SEALL V188 CMK	10000	Newark & SATS
.....	V623 SAX		
.....	(3) PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
.....	MVY MVY230 V34 SEY V268 HTO V46 CCC V16	10000	N.E. Philadelphia
.....	DIXIE V276 ARD		
.....	(1) MINNK V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
.....	FREDO	10000	Norwood
.....	MVY MVY230 V34 SEY HTO V308 BRIGS ACY	10000	Philadelphia
.....	V184 OOD		
.....	(1) MINNK V374 GON CCC V16 VCN OOD	10000	Philadelphia
.....	FREDO BOS PSM ENE	10000	Portland
.....	FREDO BOS	10000	Portsmouth
.....	Direct	10000	Providence
.....	MVY MVY230 V34 SEY HTO V308 CHOPS V16	10000	Richmond
.....	(1) MINNK V374 GON CCC V16	10000	Richmond
.....	PVD V146 ALB	10000	Rochester
.....	PVD V405 BDL V205 TRESA	10000	Stewart
.....	PVD V146 ALB	10000	Syracuse
.....	MVY MVY230 V34 SEY HTO V308 MANTA V276	10000	Trenton
	RBV		
.....	(1) MINNK V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton
.....	(5) MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Westhampton B
.....	(1) MINNK V374 GON CCC	10000	Westhampton B
.....	PVD V167 HFD V1 MAD V475 BDR BDR288	10000	White Plains
	RYMES		
.....	PVD PUT	10000	Worcester
Cape/Martha's Vineyard	PVD V146	10000	Albany
	MVY MVY230 V34 SEY HTO V308 BRIGS	10000	Atlantic City
	(1) V374 GON CCC V16 JFK V229	10000	Atlantic City
	MVY MVY230 V34 SEY HTO V268	10000	Baltimore
	(1) V374 GON CCC V16 ENO V268	10000	Baltimore
	FREDO BOS PSM ENE	10000	Bar Harbor
	FREDO	10000	Boston & SATS
	PVD V405 BDL	10000	Bradley
	MVY MVY230 V34 SEY HTO HT0302 KEYED (water)	10000	Bridgeport
	(land) V374 CREAM	10000	Bridgeport
	PVD V146 ALB V14	10000	Buffalo
	PVD V151 GDM V229	10000	Burlington
	FREDO BOS MHT CON	10000	Concord
	(3) PVD HFD V1 MAD V475 BDR BDR288	10000	Danbury
	RYMES		
	(5) MVY V146 BAF IGN V157 HAARP	10000	Danbury

TOWER ENROUTE CONTROL

Approach Control Area
Including Satellites)

		Highest Altitude	Destination
Route			
(1) MVY MVY230 V34 SEY HTO V268 ENO	10000	Dover AFB	
(1) V374 GON CCC V16 ENO	10000	Dover AFB	
PVD V146 CTR V270	10000	Elmira	
PVD V146 CTR V270	10000	Erie	
(5) MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Farmingdale	
(1) V374 GON CCC V16 DPK	10000	Farmingdale	
Direct	10000	Groton	
MVY MVY230 V58 HFD	10000	Hartford	
(5) MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Islip	
(1) V374 GON CCC	10000	Islip	
PVD V151 GDM	10000	Keene	
(5) MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Kennedy	
(1) V374 GON CCC V16 DPK	10000	Kennedy	
PVD V167 HFD V1 MAD V475	10000	LaGuardia	
PVD V151	10000	Lebanon	
FREDO BOS MHT	10000	Manchester	
MVY MVY230 V34 SEY HTO V308 DRIFT V312 CYN	10000	McGuire AFB	
(1) V374 GON CCC V16 CYN	10000	McGuire AFB	
(1) PVD V167 HFD V229 V188 CMK V623 SAX	10000	Newark & SATS	
(3) PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS	
MVY MVY230 V34 SEY HTO V308 MANTA V276	10000	N.E. Philadelphia	
ARD			
(1) V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia	
FREDO	10000	Norwood	
MVY MVY230 V34 SEY HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia	
(1) V374 GON CCC V16 VCN OOD	10000	Philadelphia	
FREDO BOS PSM ENE	10000	Portland	
FREDO BOS PSM	10000	Portsmouth	
Direct	10000	Providence	
MVY MVY230 V34 SEY HTO V308 CHOPS V16	10000	Richmond	
(1) V374 GON CCC V16	10000	Richmond	
PVD V146 ALB	10000	Rochester	
PVD V405 BDL V205 STUBY	10000	Stewart	
PVD V146 ALB	10000	Syracuse	
MVY MVY230 V34 SEY HTO V308 MANTA V267 RBV	10000	Trenton	
(1) V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton	
MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Westhampton Beach	
(1) V374 GON CCC	10000	Westhampton Beach	
PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains	
PVD PUT	10000	Worcester	
Cape/Nantucket			
ACK 146	10000	Albany	
ACK V34 SEY HTO V308 BRIGGS	10000	Atlantic City	
(1) ACK V146 MVY V374 GON CCC V16 JFK V229	10000	Atlantic City	
ACK FREDO BOS PSM ENE	10000	Augusta	
ACK V34 SEY HTO V268	10000	Baltimore	
(1) ACK V146 MVY V374 GON CCC V16 ENO V268	10000	Baltimore	
ACK FREDO BOS PSM ENE BGR	10000	Bangor	
ACK FREDO BOS PSM ENE	10000	Bar Harbor	
ACK FREDO	10000	Bedford	
ACK FREDO	10000	Boston & SATS	
ACK V146 PVD V405 BDL	10000	Bradley	
ACK V34 SEY HTO HT0302 KEYED (water)	10000	Bridgeport	
(land) ACK V146 MVY V374 CREAM	10000	Bridgeport	
ACK V146 ALB V14	10000	Buffalo	
ACK V146 PVD V151 GDM V229	10000	Burlington	
ACK FREDO BOS MHT CON	10000	Concord	
(3) ACK V146 PVD HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury	
(5) ACK V146 BAF IGN V157 HAARP	10000	Danbury	
ACK V34 SEY HTO V268 ENO	10000	Dover AFB	
(1) ACK V146 MVY V374 GON CCC V16 ENO	10000	Dover AFB	
ACK V146 CTR V270	10000	Elmira	
ACK V146 CTR V270	10000	Erie	

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

		Highest Altitude	Destination
	Route		
	..... (5) ACK V34 SEY V268 HTO V46 DPK	10000	Farmingdale
	..... (1) ACK V146 MVY V374 GON CCC V16 DPK	10000	Farmingdale
	..... ACK	10000	Groton
	..... ACK V58 HFD	10000	Hartford
	..... (5) ACK V34 SEY V268 HTO V46 CCC	10000	Islip
	..... (1) ACK V146 MVY V374 GON CCC	10000	Islip
	..... ACK V146 PVD V151 GDM	10000	Keene
	..... (5) ACK V34 SEY V268 HTO V46 DPK	10000	Kennedy
	..... (1) ACK V146 MVY V374 GON CCC V16 DPK	10000	Kennedy
	..... ACK V146 PVD V167 HFD V1 MAD V475	10000	La Guardia
	..... ACK V146 PVD V151	10000	Lebanon
	..... ACK FREDO BOS MHT	10000	Manchester
	..... ACK V34 SEY HTO V308 DRIFT V312 CYN	10000	McGuire AFB
	..... (1) ACK V146 MVY V374 GON CCC V16 CYN	10000	McGuire AFB
	..... (1) ACK V146 PVD V167 HFD V229 V188 CMK V623 SAX	10000	Newark & SATS
	..... (3) ACK V146 PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
	..... ACK V34 SEY HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
	..... (1) ACK V146 MVY V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
	..... ACK FREDO	10000	Norwood
	..... ACK V34 SEY HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
	..... (1) ACK V146 MVY V374 GON CCC V16 VCN OOD	10000	Philadelphia
	..... ACK FREDO BOS PSM ENE	10000	Portland
	..... ACK FREDO BOS PSM	10000	Portsmouth
	..... ACK V146 PVD	10000	Providence
	..... ACK V34 SEY HTO V308 CHOPS V16	10000	Richmond
	..... (1) ACK V146 MVY V374 GON CCC V16	10000	Richmond
	..... ACK V146 PVD V405 BDL V205 TRESA	10000	Stewart
	..... ACK V146 ALB	10000	Syracuse
	..... ACK V34 SEY HTO V308 MANTA V276 RBV	10000	Trenton
	..... (1) ACK V146 MVY V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton
	..... (5) ACK V34 SEY V268 HTO	10000	Westhampton B
	..... (1) ACK V146 MVY V374 GON CCC	10000	Westhampton B
	..... ACK V146 PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
	..... ACK V146 PUT	10000	Worcester
Charleston	..... V35	9000	Clarksburg
	..... V4	9000	Elkins
	..... HVQ HVQ268 KIRRK	10000	Huntington
Clarksburg	..... V35	10000	Charleston
	..... V37 EKN V4	10000	Charleston
	..... V35	8000	Morgantown
	..... V37 (OTFC only)	8000	Pittsburgh
Dover AFB	..... ENO V268 LEEAH	7000	Atlantic City
	..... ENO V268 SWANN	6000	Baltimore
	..... V16 JFK V229 BDR (Single Engine only)	7000	Bridgeport
	..... ENO V16 HEDGE	3000	Easton
	..... V16 JFK V229 (Single Engine only)	7000	Hartford
	..... ENO V16 CYN	7000	McGuire AFB
	..... ENO V29 SBY V1	6000	Norfolk
	..... ENO V16	6000	Patuxent River
	..... ENO V29 PXT063 PXT	4000	Patuxent River
	..... ENO V29 DQO	5000	Philadelphia
	..... ENO V29	6000	Salisbury
	..... ENO V16 V308 OTT	6000	Washington
	..... ENO V29 DQO	5000	Wilmington
Dulles	..... DIRECT	4000	Baltimore
	..... MRB V214 WOOLY EMI V419 MXE ARD V214 METRO (-180 kts)	7000	Newark
 MRB V214 WOOLY EMI V419 MXE V3 SBJ TEB METRO (-180 kts only)	7000	Teterboro
 DIRECT	3000	Washington

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)	Route	Highest Altitude	Destination
Elmira	..... V428 V14	8000	Albany
	..... V72	8000	Binghamton
	..... V147	8000	Rochester
	..... V31	8000	Rochester
	..... V35	8000	Syracuse
	..... V36 V29	8000	Wilkes-Barre
	..... V147	8000	Wilkes-Barre
Erie	..... V43	9000	Buffalo
	..... V14	9000	Buffalo
	..... V2	9000	Buffalo
	..... V90 DKK	9000	Buffalo
	..... V464 DKK	9000	Buffalo
	..... JHW V115	9000	Buffalo
	..... JHW V265 DKK	9000	Buffalo
	..... V522 V188 JFN (East-bound)	8000	Cleveland
	..... V522 (East-bound)	8000	Cleveland
	..... JFN V14 MENTO (West-bound)	8000	Cleveland
	..... V37 (Overflight traffic only)	8000	Pittsburgh
	..... V43	8000	Youngstown
Griffiss	..... UCA V490 GALWA	10,000	Albany
	..... UCA V2	10,000	Albany
	..... GGT V14	10,000	Albany
	..... UCA V428 V29	8000	Binghamton
	..... UCA V428	8000	Elmira
	..... UCA V496	10,000	Glens Falls
	..... UCA V2	10,000	Syracuse
	..... UCA V428 V153	10,000	Syracuse
	..... V14 V153	10,000	Syracuse
Harrisburg	..... HAR V162 ETX	7000	Allentown
	..... LRP V39 ETX	7000	Allentown
	..... HAR V469 OOD V184	5000	Atlantic City
	..... LRP LRP144 PADRE DQO OOD V184	5000	Atlantic City
	..... LRP V499	6000	Baltimore
	..... HAR V31	8000	Baltimore
	..... LRP V499	7000	Binghamton
	..... LRP V39 ROBRT AML	8000	Dulles
	..... HAR V162 V39 ROBRT AML	8000	Dulles
	..... LRP V39 V162 FJC V6 V232 COL (Props only)	7000	Kennedy
	..... HAR V162 FJC V6 V232 COL (Props only)	7000	Kennedy
	..... HAR V162 FJC V6 V232 TYKES V123 NANCI (Props only)	7000	LaGuardia
	..... LRP V39 V162 FJC V6 V232 TYKES V123 NANCI (Props only)	7000	LaGuardia
	..... HAR V162 FJC BWZ (Props only)	7000	Newark
	..... LRP V39 V162 FJC BWZ (Jets only)	7000	Newark
	..... LRP V210 BUNTS	5000	North Philadelphia
	..... HAR V210 BUNTS	5000	Philadelphia
	..... LRP LRP082 HUMEL (RDG ILS)	3000	Reading
	..... HAR V12 BOYER	5000	Reading
	..... HAR V162 FJC STW	7000	Teterboro
	..... LRP V39 V162 FJC STW	7000	Teterboro
	..... HAR V265 KRANT	8000	Washington
	..... LRP V93 BAL	8000	Washington
	..... HAR V162 FJC STW SAX V39 BREZY	7000	Westchester Co.
	..... LRP V39 V162 FJC STW SAX V39 BREZY	7000	Westchester Co.
	..... LRP V93	7000	Wilkes-Barre
	..... HAR RAV HZL	7000	Wilkes-Barre
	..... LRP LRP144 PADRE DQO	5000	Wilmington
	..... V469	5000	Wilmington
Huntington	..... V128	9000	Charleston
	..... V4	9000	Charleston
	..... DIRECT	9000	Charleston
Manchester	..... EEN V93 V292 V408 LHY	10000	Allentown
	..... (1) GDM ORW V16 JFK V229	10000	Atlantic City
	..... GDM ORW V308 BRIGS	10000	Atlantic City

TOWER ENROUTE CONTROL

Approach Control Area
(Including Satellites)

	Route	Highest Altitude	Destination
	(1) GDM ORW V16 ENO V268 SWANN	10000	Baltimore
	GDM ORW HTO V268 SWANN	10000	Baltimore
	EEN V93 V292 V408 LHY V93 BAL	10000	Baltimore
	(1) GDM ORW V16 JFK COL	10000	Belmar
	GDM ORW V308 MANTA V276 DIXIE	10000	Belmar
	TOMIE LWM	10000	Boston
	GDM V229 WITNY	10000	Bradley
	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
	GDM V229 HFD	10000	Bridgeport
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
	(3) GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
	(1) GDM ORW V16 ENO	10000	Dover AFB
	GDM ORW V308 HTO V268 ENO	10000	Dover AFB
	EEN V93 CTR V270	10000	Elmira
	GDM ORW V16 DPK	10000	Farmingdale
	GDM V14 ORW GON	10000	Groton
	EEN V93 V292 V408 LHY V93 V162 HAR	10000	Harrisburg
	GDM V229 HFD	10000	Hartford
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
	LWM BOS GAILS	10000	Hyannis
	GDM ORW V16 CCC	10000	Islip
	GDM ORW V16 DPK	10000	Kennedy
	(3) GDM V229 HFD V1 MAD V475	10000	LaGuardia
	EEN V93 V292 V408 LHY V93	10000	Lancaster
	BOS	10000	Marthas Vineyard
	BOS LFV	10000	Nantucket
	(1) GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	(3) GDM V3 CMK V623 SAX	10000	Newark & SATS
	(1) CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	(3) CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	GDM V229 HFD	10000	New Haven
	CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
	(1) GDM ORW V16 JFK V1	10000	Norfolk
	GDM ORW V308 HTO V139	10000	Norfolk
	(1) GDM ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
	GDM ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
	(1) GDM ORW V16 VCN OOD	10000	Philadelphia
	GDM ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
	EEN V93 V292 V408 LHY V58 GRACE	10000	Pittsburgh
	EEN CTR	10000	Pittsfield
	GDM V151 PVD	10000	Providence
	BOS	10000	Provincetown
	(1) GDM ORW V16	10000	Richmond
	GDM ORW HTO V268 ENO V16	10000	Richmond
	GDM V39 STUBY V205 TRESA	10000	Stewart
	CAM V490 UCA	10000	Syracuse
	(1) GDM ORW V16 DIXIE V276 RBV	10000	Trenton
	GDM ORW V308 MANTA V276 RBV	10000	Trenton
	GDM V229 HFD V3 SORRY	10000	Waterbury-Oxford
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
	GDM ORW V308 HTO	10000	Westhampton Beach
	(3) GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
	(5) EEN V93 PWL IGN V157 HAARP	10000	White Plains
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
	(1) GDM ORW V16 JFK V229 PANZE V44 SIE	10000	Wildwood
	GDM ORW V308 SIE	10000	Wildwood
	EEN V93 V292 V408 LHY	10000	Wilkes-Barre
	GDM V229 SPENO	10000	Worcester
Manchester/Pease	EEN V93 V292 V408 LHY	10000	Allentown
	(1) MHT V106 GDM ORW V16 JFK V229	10000	Atlantic City
	MHT V106 GDM ORW V308 BRIGS	10000	Atlantic City

pproach Control Area
Including Satellites)

		Highest Altitude	Destination
.....	Route		
.....	(1) MHT V106 GDM ORW V16 ENO V268 SWANN	10000	Baltimore
.....	MHT V106 GDM ORW HTO V268 SWANN	10000	Baltimore
.....	EEN V93 V292 V408 LHY V93 BAL	10000	Baltimore
.....	LWM	10000	Bedford
.....	(1) MHT V106 GDM ORW V16 JFK COL	10000	Belmar
.....	MHT V106 GDM ORW V308 MANTA V276 DIXIE	10000	Belmar
.....	STEVO LWM	10000	Boston
.....	MHT V106 GDM V229 WITNY	10000	Bradley
.....	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
.....	MHT V106 GDM V229 HFD	10000	Bridgeport
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
.....	(3) MHT V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
.....	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
.....	(1) MHT V106 GDM ORW V16 ENO	10000	Dover AFB
.....	MHT V106 GDM ORW V308 HTO V268 ENO	10000	Dover AFB
.....	EEN V93 CTR V270	10000	Elmira
.....	MHT V106 GDM ORW V16 DPK	10000	Farmingdale
.....	MHT V106 GDM V14 ORW GON	10000	Groton
.....	EEN V93 V292 V408 LHY V93 V162 HAR	10000	Harrisburg
.....	MHT V106 GDM V229 HFD	10000	Hartford
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
.....	EXALT V139 TONNI	10000	Hyannis
.....	MHT V106 GDM ORW V16 CCC	10000	Islip
.....	MHT V106 GDM ORW V16 DPK	10000	Kennedy
.....	(3) MHT V106 GDM V229 HFD V1 MAD V475	10000	LaGuardia
.....	EEN V93 V292 V408 LHY V93	10000	Lancaster
.....	EXALT V139 TONNI	10000	Marthas Vineyard
.....	EXALT V139 TONNI	10000	Nantucket
.....	(1) MHT V106 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
.....	(3) MHT V106 GDM V3 CMK V623 SAX	10000	Newark & SATS
.....	(1) CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
.....	(3) CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
.....	MHT V106 GDM V229 HFD	10000	New Haven
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
.....	(1) MHT V106 GDM ORW V16 JFK V1	10000	Norfolk
.....	MHT V106 GDM ORW V308 HTO V139	10000	Norfolk
.....	LWM	10000	Norwood
.....	(1) MHT V106 GDM ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
.....	MHT V106 GDM ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
.....	(1) MHT V106 GDM ORW V16 VCN OOD	10000	Philadelphia
.....	MHT V106 GDM ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
.....	EEN V93 V292 V408 LHY V58 GRACE	10000	Pittsburgh
.....	EEN CTR	10000	Pittsfield
.....	MHT V106 GDM V151 PVD	10000	Providence
.....	EXALT V139 TONNI	10000	Provincetown
.....	(1) MHT V106 GDM ORW V16	10000	Richmond
.....	MHT V106 GDM ORW HTO V268 ENO V16	10000	Richmond
.....	MHT V106 GDM V39 STUBY V205 TRESA	10000	Stewart
.....	MHT V490 UCA	10000	Syracuse
.....	(1) MHT V106 GDM ORW V16 DIXIE V276 RBV	10000	Trenton
.....	MHT V106 GDM ORW V308 MANTA V276 RBV	10000	Trenton
.....	MHT V106 GDM V229 HFD V3 SORRY	10000	Waterbury-Oxford
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
.....	MHT V106 GDM ORW V308 HTO	10000	Westhampton Beach
.....	(3) MHT V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
.....	(5) EEN V93 PWL IGN V157 HAARP	10000	White Plains
.....	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
.....	(1) MHT V106 GDM ORW V16 JFK V229 PANZE V44 SIE	10000	Wildwood
.....	MHT V106.GDM ORW V308 SIE	10000	Wildwood
.....	EEN V93 V292 V408 LHY	10000	Wilkes-Barre

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

	Route	Highest Altitude	Destination
	MHT V106 GDM V229 SPENO	10000	Worcester
McGuire	V16 DIXIE V229	4000	Atlantic City
	COL COL192 DIXIE V229	4000	Atlantic City
	DIXIE V16 VCN (Overflights only)	6000	Atlantic City
	CYN V1 HOWIE (Overflights only)	6000	Atlantic City
	DIXIE V229 BDR BDR014 JUDDS (Preferred Single Engine Route)	7000	Bradley
	DIXIE V16 ENO	6000	Dover AFB
	DIXIE V229 (Single Engine only)	7000	Hartford
	DIXIE V229 HFD V167 PVD V151 GAILS (Single Engine Only)	7000	Hyannis
	RBV V276 DIXIE V16 JFK CCC (Single Engine only)	5000	Islip
	V184 ZIGGI JFK210 JFK CCC (No single engine; N/A btn 1400–2100 local)	5000	Islip
	GXU GXU055 RBV122 ZIGGI JFK210 JFK (No Single Engine)	5000	Kennedy
	RBV V276 DIXIE V16 JFK (Single Engine only)	5000	Kennedy
	RBV V276 ZIGGI JFK210 JFK (Twins only)	5000	Kennedy
	V184 ZIGGI JFK210 JFK (Twins only)	5000	Kennedy
	V229 JFK (Single Engine only)	5000	Kennedy
	RBV V123 NANCI (Props)	4000	LaGuardia
	RBV V123 NANCI (Jets only)	8000	LaGuardia
	DIXIE V229 BDR MAD V475 V188 GON V374 (Single Engine Only)	7000	Martha's Vineyard
	DIXIE V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine Only)	7000	Nantucket
	V184 ZIGGI V276 RBV RBV005 OWBIE (Jets only)	6000	Newark
	DIXIE V276 RBV RBV005 OWBIE (Single engine only)	5000	Newark
	V229 DIXIE V276 RBV V249 METRO (Turbojet only)	4000	Newark (Sats)
New York/Bridgeport	V184 ZIGGI V276 ARD	4000	N. Philadelphia
	V1 DIXIE V276 ARD	4000	N. Philadelphia
	RBV V276 ARD	4000	No. Philadelphia
	V1 CYN V312 OOD (Props only)	4000	Philadelphia
	V1 CYN V312 OOD (Jets only)	5000	Philadelphia
	DIXIE V229 JFK V229 BDR MAD V475 V188 GON (Single engine)	7000	Providence
	DIXIE V16 VCN ATR V1	6000	Salisbury
	V184 ZIGGI V276 RBV V249 SAX V39 BREZY	5000	Westchester Co.
	SOARS V487 CANAN	10000	Albany
	HUO V162 FJC	5000	Allentown
	DPK V16 DIXIE V229 ACY (Single Engine only)	6000	Atlantic City
	MAD V1 HFD V229 GDM V39 CON	10000	Augusta
	MAD HFD CLOWW (/E, /F, /G only)	10000	Augusta
	DPK V16 ENO V268 SWANN (Single Engine only)	6000	Baltimore
	MAD V1 HFD V229 GDM V39 AUG	10000	Bangor
	MAD HFD CLOWW (/E, /F, /G only)	10000	Bangor
	MAD V1 HFD V229 GDM V106 ENE	10000	Bar Harbor
	MAD HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	MAD V1 HFD HFD053 DREEM	10000	Bedford
	DPK JFK COL	6000	Belmar
	MAD V475 V188 GON	9000	Block Island
	MAD V1 HFD HFD053 DREEM	9000	Boston (North)
	(3) MAD V475 ORW V16 WOONS	10000	Boston
	BDR BDR014 JUDDS	10000	Bradley
	BDR	2000	Bridgeport SATS
	SOARS V487 CAM	10000	Burlington
	BDR JUDDS (/E, /F, /G only)	1000	Burlington
	HUO V162 HAR	5000	Capital City
	MAD V1 HFD V229 GDM V39 CON	10000	Concord
	MAD HFD CLOWW (/E, /F, /G only)	10000	Concord
	DPK V16 DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Single Engine only)	6000	Dulles
	MAD MAD126 MONDI	7000	Groton

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)

		Highest Altitude	Destination
	Route		
.....	HTO	3000	Hampton
.....	MAD V1 HFD	5000	Hartford
.....	MAD V475 PVD V151 GAILS	10000	Hyannis
.....	CCC	4000	Islip
.....	MAD V1 HFD V229 GDM	10000	Keene
.....	BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
.....	DPK	4000	Kennedy
.....	R/V LGA075	4000	LaGuardia
.....	HUO V162 ETX V39 LRP	5000	Lancaster
.....	MAD V1 HFD V229 GDM V151	10000	Lebanon
.....	BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
.....	MAD V1 HFD V229 GDM V106 MHT	10000	Manchester
.....	MAD HFD CLOWW (/E, /F, /G only)	10000	Manchester
.....	DPK V16 DIXIE V16 CYN (Single Engine only)	6000	McGuire
.....	MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
.....	MAD	3000	Meriden Markham
.....	DPK V16 VCN (Single Engine only)	6000	Millville
.....	MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket
.....	MAD V475 V188 GON V374 MINNK	9000	New Bedford
.....	DIRECT	2000	New Haven
.....	CMK V188 SAX	4000	Newark
.....	DPK V16 DIXIE V1 (Single Engine only)	6000	Norfolk
.....	(3) MAD V475 ORW V16 WOONS	10000	Norwood
.....	DPK V16 DIXIE V276 ARD (Single Engine only)	6000	N. Philadelphia
.....	DIXIE V16 CYN V312 OOD (Single Engine only)	6000	Philadelphia
.....	MAD V1 HFD V229 GDM V106 ENE	10000	Portland
.....	MAD HFD CLOWW (/E, /F, /G only)	10000	Portland
.....	(3) MAD V1 HFD V229 GDM V106 RAYMY	10000	Portsmouth
.....	MAD HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
.....	MAD V475 V188 GON	9000	Providence
.....	MAD V475 PVD V151 GAILS	10000	Provincetown
.....	MAD V475 V188 GON	9000	Quonset
.....	SAX V249 SBJ V30 ETX V39 FLOAT (Props only)	7000	Reading
.....	DPK V16 (Single Engine only)	6000	Richmond
.....	DPK V16 DIXIE V1 (Single Engine only)	6000	Salisbury
.....	HAAYS HUO V273 HNK	10000	Syracuse
.....	DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Washington
.....	BDR BDR 288 RYMES	4000	Westchester Co.
.....	DPK V16 DIXIE V229 PANZE V44 SIE (Single Engine only)	6000	Wildwood
.....	MAD V1 GRAYM	9000	Worcester
New York /Islip	SAX V249 SBJ V30 ETX (Non jet/Non turboprop)	8000	Allentown
	DPK V16 DIXIE V229 ACY (Single Engine only)	6000	Atlantic City
	DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Andrews AFB
	MAD HFD CLOWW (/E, /F, /G only)	10000	Augusta
	DPK V16 ENO V268 SWANN (Single Engine only)	6000	Baltimore
	MAD HFD CLOWW (/E, /F, /G only)	10000	Bangor
	MAD HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	DPK JFK COL	6000	Belmar
	HTO V268 SEY	7000	Block Island
	HTO V308 ORW V16 WOONS	9000	Boston
	MAD V1 HFD HFD053 DREEM	9000	Boston (North)
	BDR BDR014 JUDDS	8000	Bradley
	BDR BDR014 JUDDS (Jets only)	10000	Bradley
	BDR	4000	Bridgeport
	BDR JUDDS (/E, /F, /G only)	10000	Burlington
	SAX V249 SBJ V30 ETX V162 HAR (Non jet/Non turboprop only)	8000	Capital City
	MAD HFD CLOWW (/E, /F, /G only)	10000	Concord
	DPK V16 DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Single Engine only)	6000	Dulles
	HTO HT0034 MONDI	7000	Groton
	HTO	3000	Hampton
	MAD V1 HFD	5000	Hartford

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

	Route	Highest Altitude	Destination
	HTO V139 PVD V151 GAILS	9000	Hyannis
	CCC	2000	Islip (SATS)
	BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
	DPK	3000	Kennedy
	R/V LGA075	5000	LaGuardia
	HTO HT0302 NESSI LGA075	6000	LaGuardia
	SAX V249 SBJ LANNA V30 ETX V39 LRP (Props only)	8000	Lancaster
	BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
	DPK V16 CYN (Single Engine only)	6000	McGuire
	MAD HFD CLOWW (/E, /F, /G only)	10000	Manchester
	HTO V139 WACKY V374 MVY (Single Engine)	9000	Martha's Vin
	HTO V46 CLAMY (Twin Engine)	9000	Martha's Vin
	MAD	5000	Meriden
	DPK V16 VCN (Single Engine only)	6000	Millville
	HTO V46 CLAMY (Twin Engine)	9000	Nantucket
	HTO SEY V58 NEWBE DEEPO (Single Engine)	9000	Nantucket
	HTO V139 WACKY	9000	New Bedford
	HVN	4000	New Haven
	CMK V188 SAX	4000	Newark
	DPK V16 DIXIE V1 (Single Engine only)	6000	Norfolk
	DPK V16 DIXIE V276 ARD (Single Engine only)	6000	N. Philadelphia
	DPK V16 CYN V312 OOD (Single Engine only)	6000	Philadelphia
	MAD HFD CLOWW (/E, /F, /G only)	10000	Portland
	MAD HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
	HTO V139 WACKY	9000	Providence
	HTO V139 WACKY	9000	Quonset
	SAX V249 SBJ V30 ETX V39 FLOAT (Non jet/Non turboprop only)	8000	Reading
	DPK V16 (Single Engine only)	6000	Richmond
	DPK V16 DIXIE V1 (Single Engine only)	6000	Salisbury
	DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Washington
	BDR BDR 288 RYMES	5000	Westchester
	HTO BDR BDR 288 RYMES	6000	Westchester
	HTO V308 GON	9000	Westerly
	DPK V16 DIXIE V229 PANZE V44 SIE (Single Engine only)	6000	Wildwood
	MAD V1 GRAYM	9000	Worcester
New York /Kennedy	SAX V249 SBJ V30 ETX (Non jet/Non turboprop)	8000	Allentown
	DIXIE V229 ACY (Props only)	6000	Atlantic City
	DIXIE V1 HOWIE (Jets only)	8000	Atlantic City
	DIXIE V1 V308 OTT (Props only)	6000	Andrews AFB
	BDR HFD CLOWW (/E, /F, /G only)	10000	Augusta
	DIXIE V16 ENO V268 SWANN (Props only)	6000	Baltimore
	BDR HFD CLOWW (/E, /F, /G only)	10000	Bangor
	BDR HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	COL	2000	Belmar
	BDR MAD V475 V188 GON	9000	Block Island
	BDR V229 HFD V3 WOONS	9000	Boston
	BDR V229 HFD HFD053 DREEM	9000	Boston (Nort
	BDR HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
	BDR BDR014 JUDDS	8000	Bradley
	BDR (Jets only)	10000	Bradley
	BDR	3000	Bridgeport
	BDR JUDDS (/E, /F, /G only)	10000	Burlington
	SAX V249 SBJ V30 ETX V162 HAR (Non jet/Non turboprop)	8000	Capital City
	BDR HFD CLOWW (/E, /F, /G only)	10000	Concord
	DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Non-pressurized aircraft only)	6000	Dulles
	BDR MAD MAD126 MONDI	9000	Groton
	R/V CCC 232 CCC HTO	3000	Hampton
	BDR V229 HFD	9000	Hartford
	BDR V229 HFD V167 PVD V151 GAILS	9000	Hyannis
	R/V ILS 6 LOC (Text Info)	3000	IIslip
	R/V CCC232 CCC	3000	IIslip
	BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)

	Route	Highest Altitude	Destination
.....	Direct	2000	LaGuardia
.....	SAX V249 SBJ V30 ETX V162 V93 LRP (Props only)	8000	Lancaster
.....	BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
.....	DIXIE V16 CYN	6000	McGuire
.....	BDR HFD CLOWW (/E, /F, /G only)	10000	Manchester
.....	BDR MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
.....	BDR MAD	3000	Meriden Markham
.....	DIXIE V16 VCN (Props only)	6000	Millville
.....	BDR MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket
.....	COL V232 SBJ	3000	Newark
.....	BDR MAD V475 V188 GON V374 MINNK	9000	New Bedford
.....	DIXIE V1 (Props only)	6000	Norfolk
.....	DIXIE V276 ARD	4000	N. Philadelphia
.....	DIXIE V16 CYN V312 OOD (Props only)	6000	Philadelphia
.....	DIXIE V16 CYN V312 OOD (Jets only)	8000	Philadelphia
.....	BDR HFD CLOWW (/E, /F, /G only)	10000	Portland
.....	BDR HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
.....	BDR MAD V475 V188 GON (210 kts +)	9000	Providence
.....	BDR MAD V475 V188 GON	9000	Quonset
.....	SAX V249 SBJ V30 ETX V39 FLOAT (Non jet/Non turboprop only)	8000	Reading
.....	DIXIE V16 (Props only)	6000	Richmond
.....	DIXIE V1 (Props only)	6000	Salisbury
.....	DIXIE V1 V308 OTT (Props only)	6000	Washington
.....	DPK V483 CMK	2000	Westchester Co
.....	BDR MAD V475 V188 GON	9000	Westerly
.....	DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
.....	DIXIE V1 HOWIE (Jets only)	8000	Wildwood
.....	BDR MAD V1 GRAYM	9000	Worcester
New York/ LaGuardia	..... SAX V249 SBJ V30 ETX	8000	Allentown
	..... DIXIE V229 ACY (Props only)	6000	Atlantic City
	..... DIXIE V1 HOWIE (Jets only)	8000	Atlantic City
	..... SAX V249 SBJ LANNA V30 ETX V39 LRP V93	8000	Andrews AFB
	..... BAL (Props only)		
	..... BDR HFD CLOWW (/E, /F, /G only)	10000	Augusta
	..... BDR HFD CLOWW (/E, /F, /G only)	10000	Bangor
	..... SAX V249 SBJ LANNA V30 ETX V39 LRP V499	8000	Baltimore
	..... BAL (Props only)		
	..... BDR HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	..... JFK COL	6000	Belmar
	..... BDR MAD V475 V188 GON	9000	Block Island
	..... BDR V229 HFD V3 WOONS	9000	Boston
	..... BDR V229 HFD HFD053 DREEM	9000	Boston (North)
	..... BDR HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
	..... BDR BDR014 JUDDS	8000	Bradley
	..... BDR (Jets only)	10000	Bradley
	..... BDR 248 CCC285 PUGGS V229 BDR	5000	Bridgeport
	..... R/V BDR248 BDR. . .(Helicopter Route)	5000	Bridgeport (Points NE)
	..... BDR JUDDS (/E, /F, /G only)	10000	Burlington
	..... SAX V249 SBJ V30 ETX V162 HAR	8000	Capital City
	..... BDR HFD CLOWW (/E, /F, /G only)	10000	Concord
	..... SAX V249 SBJ LANNA V30 ETX V39 ROBRT AML (Props only)	8000	Dulles
	..... BDR MAD MAD126 MONDI	9000	Groton
	..... BDR 248 BDR HTO	5000	Hampton
	..... BDR V229 HFD	9000	Hartford
	..... BDR V229 HFD V167 PVD V151 GAILS	9000	Hyannis
	..... BDR 248 CCC285 CCC	5000	Islip
	..... BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
	..... DPK	5000	Kennedy
	..... SBJ SAX V249 V30 ETX V162 V93 LRP (Props only)	7000	Lancaster
	..... BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
	..... DIXIE V16 CYN	6000	McGuire
	..... BDR MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
	..... BDR HFD CLOWW (/E, /F, /G only)	10000	Manchester
	..... BDR MAD	5000	Meriden Markham
	..... DIXIE V16 VCN (Props only)	6000	Millville
	..... BDR MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

	Route	Highest Altitude	Destination
	SBJ	3000	Newark
.....	BDR MAD V475 V188 GON V374 MINNK	9000	New Bedford
.....	DIXIE V1 (Props only)	6000	Norfolk
.....	BDR HFD CLOWW (/E, /F, /G only)	10000	Portland
.....	BDR HFD CLOWW(/E, /F, /G only)	10000	Portsmouth
.....	BDR MAD V475 V188 GON	9000	Providence
.....	BDR MAD V475 V188 GON	9000	Quonset
.....	SBJ SAX V249 V30 ETX V39 FLOAT	7000	Reading
.....	DIXIE V16 (Props only)	6000	Richmond
.....	DIXIE V1 (Props only)	6000	Salisbury
.....	SAX V249 SBJ LANNA V30 ETX V39 LRP V499 BAL(Props only)	8000	Washington
.....	CMK	3000	Westchester
.....	DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
.....	DIXIE V1 HOWIE (Jets only)	8000	Wildwood
.....	BDR MAD V1 GRAYM	9000	Worcester
New York/Newark	.....	8000	Allentown
	.....	6000	Allentown
	.....	6000	Atlantic City
	.....	8000	Atlantic City
	.....	10000	Augusta
	.....	8000	Baltimore
	.....	6000	Baltimore
	.....	8000	Bangor
	.....	10000	Bar Harbor
	.....	10000	Belmar
	.....	2000	Block Island
	.....	9000	Block Island
	.....	9000	Boston (North)
	.....	9000	Boston (North)
	.....	9000	Boston
	.....	9000	Boston
	.....	10000	Boston
	.....	9000	Boston
	.....	10000	Boston
	.....	10000	Bradley
	.....	9000	Bradley
	.....	5000	Bridgeport
	.....	6000	Bridgeport
	.....	10000	Burlington
	.....	6000	Capital City
	.....	10000	Concord
	.....	3000	Danbury
	.....	6000	Dulles
	.....	8000	
	.....	4000	Dutchess Co
	.....	6000	Grand Strand
	.....	9000	Groton
	.....	9000	Groton
	.....	5000	Hampton
	.....	6000	Hampton
	.....	6000	Harrisburg Int
	.....	8000	
	.....	9000	Hartford
	.....	6000	Hazleton M
	.....	8000	
	.....	9000	Hartford
	.....	9000	Hyannis
	.....	9000	Hyannis
	.....	5000	IIslip
	.....	6000	IIslip

Approach Control Area
(Including Satellites)

	Route	Highest Altitude	Destination
	BREZY V39 CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Keene
	R/V DPK282 (EWR Dep 4 & EWRN)	5000	Kennedy
	COL JFK (EWR Dep 22 & EWRS)	4000	Kennedy
	LANNA V30 ETX V39 LRP (Props only)	6000	Lancaster
	(Props 210 kts +)	8000	
	BREZY V39 CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
	(4)(5) LANNA V30 ETX	8000	Lehigh Valley Intl
	DIXIE V16 (Props only)	6000	Lynchburg Rgnl/Preston Glenn Fld
	BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Manchester
	BDR MAD V475 V188 GON V374 MVY (210 kts +)	9000	Martha's Vineyard
	BREZY V39 CMK V3 HFD GON V374 MVY (-210 kts)	9000	Martha's Vineyard
	DIXIE V16 CYN	6000	McGuire
	BDR MAD	5000	Meriden
	(2) BREZY V39 CMK V3 YALER	5000	Meriden
	DIXIE V16 VCN (Props only)	6000	Millville
	BREZY V39 CMK V374 BETHA HTO	6000	Montauk
	BREZY V39 CMK V3 HFD V58 NEWBE DEPO	10000	Nantucket
	BDR MAD V475 V188 GON V374 MINNK (210 kts +)	9000	New Bedford
	BREZY V39 CMK V3 HFD V167 PVD (-210 kts)	9000	New Bedford
	(4) BIGGY V3 MAZIE	8000	New Castle Co
	(Props only)	4000	
	DIXIE V1 (Props only)	6000	Norfolk
	BIGGY V3 MAZIE	4000	Northeast Philadelphia
	SAX V213 HELON	4000	Orange Co
	(4) BIGGY V3 MAZIE	8000	Philadelphia Intl
	(Props only)	4000	
	BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portland
	BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
	SBJ BIGGY B3 MAZIE	4000	Pottstown Limerick
	BDR MAD V475 V188 GON (210 kts+)	9000	Providence
	BREZY V39 CMK V3 HFD V167 PVD (-210 kts)	9000	Providence
	BDR MAD V475 V188 GON (210 kts +)	9000	Quonset
	BREZY V39 CMK V3 HFD V167 PVD (- 210 kts)	9000	Quonset
	DIXIE V16 RIC V157 LVL V155 (Props only)	6000	Raleigh-Durham Intl
	(4) SBJ LANNA V30 ETX	8000	Reading Rgnl/Carl A Spaatz Fld
	(Props only)	4000	
	DIXIE V16 (Props only)	6000	Richmond
	LANNA V30 ETX V39 LRP V93 BAL (Props only)	6000	Ronald Reagan Washington Natl
	(Props 210 kts +)	8000	
	DIXIE V1 (Props only)	6000	Salisbury
	SAX SAX022 MANEE	4000	Stewart Intl
	SAX V213 HELON	4000	Sullivan Co Intl
	BREZY V39 CMK V374 BETHA HTO	6000	The Francis S Gabreski Arpt
	BIGGY V3 MAZIE	4000	Trenton Mercer
	BREZY V39 CMK V374 DENNA	6000	Waterbury-Oxford
	BREZY	3000	Westchester Co.
	DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
	Dixie V1 Howie (Jets only)	8000	Wildwood
	BDR MAD V1 GRAYM (210 kts +)	9000	Worcester
	BREZY V39 CMK V3 HFD V1 GRAYM (-210 kts)	9000	Worcester
New York/Stewart	STUBY V487 CANAN	10000	Albany
	STUBY V93 CON	10000	Augusta
	STUBY V93 CON V39 AUG	10000	Bangor
	STUBY V93 ENE	10000	Bar Harbor

TOWER ENROUTE CONTROL

**Approach Control Area
(Including Satellites)**

		Highest Altitude	Destination	
	Route			
.....	STUBY CEF CEF088 DREEM	10000	Bedford	
.....	PWL HFD V3 WOONS	10000	Boston	
.....	PWL PWL111 BRISS or PWL V106 BAF (BAF/CEF)	10000	Bradley	
.....	STUBY V487 CAM	10000	Burlington	
.....	STUBY V93 CON	10000	Concord	
.....	PWL HFD GON	10000	Groton	
.....	PWL PWL111 BRISS	10000	Hartford	
.....	PWL HFD V167 PVD V151 GAILS	10000	Hyannis	
.....	STUBY	10000	Keene	
.....	STUBY	10000	Lebanon	
.....	STUBY V93 EEN	10000	Manchester	
.....	PWL HFD V374 MVY	10000	Marthas Vineyard	
.....	PWL HFD V58 NEWBE DEEPO	10000	Nantucket	
.....	PWL HFD V3 WOONS	10000	Norwood	
.....	STUBY V93 EEN	10000	Portland	
.....	PWL V106 RAYMY	10000	Portsmouth	
.....	PWL HFD V167 PVD	10000	Providence	
.....	PWL HFD V167 PVD V151 GAILS	10000	Provincetown	
.....	WEARD DNY	10000	Syracuse	
.....	PWL V106 BAF	10000	Worcester	
New York/ Westchester	.....	CMK V39 SOARS V487 CANAN	10000	Albany
	.....	HUO V162 FJC	5000	Allentown
	.....	DIXIE V229 ACY (Props only)	6000	Atlantic City
	.....	DIXIE V1 HOWIE (Jets Only)	8000	Atlantic City
	.....	CMK V3 HFD V229 GDM V39 CON	10000	Augusta
	.....	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Augusta
	.....	SAX V249 SBJ LANNA V30 ETX V39 LRP V499 BAL (Props only)	8000	Baltimore
	.....	CMK V3 HFD V229 GDM V39 AUG	10000	Bangor
	.....	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bangor
	.....	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
	.....	CMK V3 HFD V229 GDM V106 ENE	10000	Bar Harbor
	.....	JFK COL	6000	Belmar
	.....	CMK V3 HFD HFD053 DREEM	10000	Boston & NO SATS
	.....	(3) CMK V3 WOONS	10000	Boston
	.....	CMK V3 HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
	.....	CMK V419 BRISS	10000	Bradley
	.....	CMK V374 DENNA	5000	Bridgeport
	.....	CMK V39 SOARS V487 BTW	10000	Burlington
	.....	CMK SOARS JUDDS (/E, /F, /G only)	10000	Burlington
	.....	HUO V162 HAR	5000	Capital City
	.....	CMK V3 HFD V229 GDM V39 CON	10000	Concord
	.....	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Concord
	.....	SAX V249 SBJ LANNA V30 ETX V39 ROBRT AML (Props only)	8000	Dulles
	.....	CMK V3 HFD GON	10000	Groton
	.....	CMK V374 BETHA HTO	5000	Hampton
	.....	CMK V3 HFD	10000	Hartford
	.....	CMK V3 HFD V167 PVD V151 GAILS	10000	Hyannis
	.....	CMK V374 DENNA BDR CCC	5000	Islip
	.....	CMK V3 HFD V229 GDM	10000	Keene
	.....	CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Keene
	.....	CMK V483 DPK	3000	Kennedy
	.....	DIRECT	3000	LaGuardia
	.....	HUO V162 ETX V39 LRP	5000	Lancaster
	.....	CMK V3 HFD V229 GDM V151	10000	Lebanon
	.....	CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
	.....	CMK V3 HFD V229 GDM V106 MHT	10000	Manchester
	.....	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Manchester
	.....	CMK V3 HFD GON V374 MVY	10000	Martha's Vineyard
	.....	DIXIE V16 CYN	6000	McGuire
	.....	Dixie V16 VCN (Props only)	6000	Millville
	.....	CMK V3 HFD V58 NEWBE DEEPO	10000	Nantucket
	.....	CMK V374 DENNA	5000	New Haven
	.....	NYACK V188 SAX (Props)	4000	Newark
	.....	NYACK V188 SAX (Jets)	5000	Newark
	.....	DIXIE V1 (Props only)	6000	Norfolk
	CMK V3 WOONS	10000	Norwood & N SATS
	CMK V3 HFD V229 GDM V106 ENE	10000	Portland

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)

	Route	Highest Altitude	Destination
	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portland
	CMK V3 HFD V229 GDM V106 RAYMY	10000	Portsmouth
	CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
	CMK V3 HFD V167 PVD	10000	Providence
	CMK V3 HFD V167 PVD V151 GAILS	10000	Provincetown
	SAX V249 SBJ V30 ETX V39 FLOAT (Props only)	7000	Reading
	DIXIE V16 (Props only)	6000	Richmond
	SAX V249 SBJ LANNA V30 ETX V39 LRP V93	8000	Ronald Reagan
	BAL (Props only)		
	DIXIE V1 (Props only)	6000	Washington Natl
	HAAYS HUO V273 SYR	10000	Salisbury
	DIXIE V229 PANZE V44 SIE (Props only)	6000	Syracuse
	DIXIE V1 HOWIE (Jets only)	8000	Wildwood
	CMK V3 HFD V1 GRAYM	10000	Wildwood
			Worcester
Norfolk			
	HCM V33 COLIN V16 PXT	9000	Patuxent River
	HPW V260 RIC (West-bound only)	9000	Richmond
	CCV V1 SBY	5000	Salisbury
	CCV V139 SWL (Northeast-bound only)	5000	Snow Hill
	HCM HCM330 SVILL	7000	Washington
Patuxent			
	SWL V139	5000	Atlantic City
	PXT V16 V44	5000	Atlantic City
	SBY V1 V44	5000	Atlantic City
	SBY332 BAL133	4000	Baltimore
	PXT V93	5000	Baltimore
	SBY V29 ENO	5000	Dover AFB
	PXT V16 ENO	5000	Dover AFB
	PXT V16	5000	Dover AFB
	SBY VI ATR	5000	Dover AFB
	PXT V213 V286 FLUKY	6000	Dulles
	COLIN V33 HCM	6000	Newport News
	SBY V1 CCV	6000	Norfolk
	SWL V139 CCV	6000	Norfolk
	WHINO V33 V286 STEIN	5000	Norfolk
	PXT V213 ENO V29 DQO	5000	Philadelphia
	SBY V29 DQO	5000	Philadelphia
	PXT V16	6000	Richmond
	SBY V1 JAMIE HCM	6000	Richmond
	COLIN V33 HCM	6000	Richmond
	PXT V31 OTT (No Overflight of D.C. Area)	4000	Washington
	SBY CHURK OTT (No Overflight of D.C. Area)	4000	Washington
Philadelphia			
	RV FJC185 FJC	4000	Allentown
	OOD VCN V184 ACY	3000	Atlantic City
	MXE V378 BAL	6000	Baltimore
	DQO V166 V378 BAL	6000	Baltimore
	OOD V157 ENO	4000	Dover AFB
	DQO V29 ENO	4000	Dover AFB
	MXE V408 ROBRT AML	8000	Dulles
	MXE V184 MXE283027 V469 HAR	6000	Harrisburg
	PNE PNE090 ARD126 V16 DIXIE (Direct) (Single Engine only)	5000	Kennedy
	PNE PNE090 ARD126 V16 V276 ZIGGI (Direct) (No Single Engine)	5000	Kennedy
	RBV V123 PROUD (Jets only)	8000	LaGuardia
	MXE MXE295 HABER LRP137 LRP	4000	Lancaster
	ARD V214 METRO (Non Turbojets only)	5000	Newark
	RBV RBV005 OWBIE (Turbojet only)	7000	Newark
	MXE MXE334 HUMEL	4000	Reading
	REGLE V3 SBJ	4000	Teterboro
	MXE V408 VINNY V93 BAL	8000	Washington
	DQO V166 V93 BAL	8000	Washington
	RV FJC185 FJC BWZ SAX V39 BREZY	5000	Westchester Co.
	RV FJC185 FJC V149 RITTY	5000	Wilkes Barre/Scranton
Pittsburgh			
	BSV (Westbound only)	8000	Akron-Canton
	V37 (Southbound only)	8000	Clarksburg
	EWC V37 (Northbound only)	8000	Erie

TOWER ENROUTE CONTROL

Approach Control Area
(Including Satellites)

		Highest Altitude	Destination
Portland	Route		
	EWC (Northbound only)	6000	Franklin
	EWC TDT (Northbound only)	6000	Jamestown
	DIRECT (Southbound only)	8000	Morgantown
	EWC (Northbound only)	8000	Youngstown
Portland	CON CAM	10000	Albany
	DIRECT	10000	Bangor
	DIRECT	10000	Bar Harbor
	ENE LWM	10000	Bedford & NO SATS
	(3) ENE PSM PSM221 STEVO LWM	10000	Boston
	(5) ENE V167 SCUPP	10000	Boston
	ENE V106 GDM V229 WITNY	10000	Bradley
	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
	ENE V106 GDM V229 HFD	10000	Bridgeport
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
	(3) ENE V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
	ENE V106 GDM V14 ORW V16 DPK	10000	Farmingdale
	ENE V106 GDM V14 ORW GON	10000	Groton
	ENE V106 GDM V229 HFD	10000	Hartford
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
	ENE V139 TONNI	10000	Hyannis
	ENE V106 GDM V14 ORW V16 CCC	10000	Islip
	ENE V106 GDM V14 ORW V16 DPK	10000	Kennedy
	ENE V139 TONNI	10000	Marthas Vineyard
	ENE V139 TONNI	10000	Nantucket
	(1) ENE V106 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	(3) ENE V106 GDM V3 CMK V623 SAX	10000	Newark & SATS
	(1) CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	(3) CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
	(1) ENE V106 GDM V14 ORW V16 V276 ARD	10000	N.E. Philadelphia
	ENE V106 GDM V14 ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
	ENE LWM	10000	Norwood
	ENE V139 BURDY	10000	Providence
	ENE V139 TONNI	10000	Provincetown
	ENE V93 STUBY V205 TRESA	10000	Stewart
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
	ENE V106 GDM V229 SPENO	10000	Worcester
Portland/Augusta	CON CAM	10000	Albany
	DIRECT	10000	Bangor
	DIRECT	10000	Bar Harbor
	ENE LWM	10000	Bedford & NO SATS
	(3) ENE PSM PSM 221 STEVO LWM	10000	Boston
	(5) ENE V167 SCUPP	10000	Boston
	LABEL V39 GDM V229 WITNY	10000	Bradley
	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
	LABEL V39 GDM V229 HFD	10000	Bridgeport
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
	LABEL V39 CON	10000	Concord
	(3) LABEL V39 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	(3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
	LABEL V39 GDM V14 ORW V16 DPK	10000	Farmingdale
	LABEL V39 GDM V14 ORW GON	10000	Groton
	LABEL V39 GDM V229 HFD	10000	Hartford
	CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
	ENE V139 TONNI	10000	Hyannis
	LABEL V39 GDM V14 ORW V16 CCC	10000	Islip
	LABEL V39 GDM V14 ORW V16 DPK	10000	Kennedy

TOWER ENROUTE CONTROL

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Approach Control Area
(Including Satellites)

	Route	Highest Altitude	Destination
	..... ENE MHT	10000	Manchester
	..... ENE V139 TONNI	10000	Marthas Vineyard
	..... ENE V139 TONNI	10000	Nantucket
	..... (1) LABEL V39 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	..... (3) LABEL V39 GDM V3 CMK V623 SAX	10000	Newark & SATS
	..... (1) CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	..... (3) CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
	..... CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
	..... (1) LABEL V39 GDM V14 ORW V16 V276 ARD	10000	N.E. Philadelphia
	..... LABEL V39 GDM V14 ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
	..... ENE LWM	10000	Norwood
	..... ENE	10000	Portsmouth
	..... ENE V139 BURDY	10000	Providence
	..... ENE V139 TONNI	10000	Provincetown
	..... LABEL V39 STUBY V205 TRESA	10000	Stewart
	..... CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
	..... (3) CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plain
	..... LABEL V39 GDM V229 SPENO	10000	Worcester
Providence	..... PUT ALB	10000	Albany
	..... HFD PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
	..... (1) ORW V16 JFK V229	10000	Atlantic City
	..... WOONS BOS PSM ENE	10000	Augusta
	..... (1) ORW V16 ENO V268 SWANN	10000	Baltimore
	..... WOONS BOS PSM ENE BGR	10000	Bangor
	..... WOONS BOS PSM ENE	10000	Bar Harbor
	..... WOONS	10000	Bedford & NO SATS
	..... (3) WOONS	10000	Boston
	..... (5) PVD V151 INNDY	10000	Boston
	..... PVD V405 BDL	10000	Bradley
	..... HFD	10000	Bridgeport
	..... PUB ALB V14	10000	Buffalo
	..... PUT V151 GDM V229	10000	Burlington
	..... WOONS MHT CON	10000	Concord
	..... (3) HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
	..... (5) PUT BAF IGN V157 HAARP	10000	Danbury
	..... (1) ORW V16 ENO	10000	Dover AFB
	..... PUT CTR V270	10000	Elmira
	..... PUT CTR V270	10000	Erie
	..... SEY HTO V46 DPK	10000	Farmingdale
	..... HFD	10000	Hartford
	..... PVD V151 GAILS	10000	Hyannis
	..... SEY HTO V46 CCC	10000	IIslip
	..... PUT V151 GDM	10000	Keene
	..... SEY HTO V46 DPK	10000	Kennedy
	..... PVD V167 HFD V1 MAD V475	10000	LaGuardia
	..... PUT V151	10000	Lebanon
	..... WOONS	10000	Manchester
	..... PVD V167 TUTOR	10000	Marthas Vineyard
	..... (1) ORW V16 CYN	10000	McGuire AFB
	..... PVD PVD143 CLAMY	10000	Nantucket
	..... (1) PVD V167 HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
	..... (3) PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
	..... HFD	10000	New Haven
	..... (1) ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
	..... WOONS	10000	Norwood & SO SATS
	..... (1) ORW V16 VCN OOD	10000	Philadelphia
	..... WOONS BOS PSM ENE	10000	Portland
	..... WOONS BOS	10000	Portsmouth
	..... PVD V151 GAILS	10000	Provincetown
	..... (1) ORW V16	10000	Richmond
	..... PUT ALB	10000	Rochester
	..... PVD V405 BDL V205 TRESA	10000	Stewart
	..... PUT ALB	10000	Syracuse
	..... (1) ORW V16 DIXIE V276 ARD	10000	Trenton

**Approach Control Area
(Including Satellites)**

		Highest Altitude	Destination
	Route		
.....	HFD	10000	Waterbury-Oxford
.....	SEY HTO V46 CCC	10000	Westhampton Beach
.....	PVD V167 HFD V1 MAD V475 BDR BDR288	10000	White Plains
	RYMES		
.....	HFD PWL V106 LHY	5000	Wilkes-Barre
.....	PUT	10000	Worcester
Providence/Groton			
.....	GON BAF V146	10000	Albany
.....	HFD PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
.....	(1) GON V374 CREAM V16 JFK V229	10000	Atlantic City
.....	ORW V16 BOS PSM ENE	10000	Augusta
.....	(1) GON V374 CREAM V16 ENO V268 SWANN	10000	Baltimore
.....	ORW V16 BOS PSM ENE BGR	10000	Bangor
.....	ORW V16 BOS PSM ENE	10000	Bar Harbor
.....	ORW V16 WOONS	10000	Bedford & NO SATS
.....	(3) ORW V16 WOONS	10000	Boston
.....	(5) PVD V151 INNDY	10000	Boston
.....	HFD	10000	Bradley
.....	GON V374 CREAM	10000	Bridgeport
.....	GON BAF V146 ALB V14	10000	Buffalo
.....	ORV V14 GDM V229	10000	Burlington
.....	ORW V16 WOONS MHT CON	10000	Concord
.....	(3) GON V374 CREAM BDR BDR288 RYMES	10000	Danbury
.....	(5) ORW BAF IGN V157 HAARP	10000	Danbury
.....	(1) GON V374 CREAM V16 ENO	10000	Dover AFB
.....	GON CTR V270	10000	Elmira
.....	GON CTR V270	10000	Erie
.....	GON V374 CREAM V16 DPK	10000	Farmingdale
.....	HFD	10000	Hartford
.....	PVD V151 GAILS	10000	Hyannis
.....	GON V374 V16 CCC	10000	Islip
.....	ORW V14 GDM	10000	Keene
.....	GON V374 CREAM V16 DPK	10000	Kennedy
.....	GON V374 CREAM BDR V475	10000	LaGuardia
.....	ORV V14 GDM V151	10000	Lebanon
.....	ORW V16 WOONS	10000	Manchester
.....	GON V374 MVY	10000	Marthas Vineyard
.....	(1) GON V374 CREAM V16 CYN	10000	McGuire AFB
.....	GON V58 NEWBE DEEPO	10000	Nantucket
.....	(1) GON HFD V229 SEALL V188 CMK V623 SAX	10000	Neward & SATS
.....	(3) GON HFD V3 CMK V623 SAX	10000	Newark & SATS
.....	GON V374 CREAM	10000	New Haven
.....	(1) GON V374 CREAM V16 DIXIE V276 ARD	10000	N.E. Philadelphia
.....	ORW V16 WOONS	10000	Norwood & SO SATS
.....	(1) GON V374 CREAM V16 VCN OOD	10000	Philadelphia
.....	ORW V16 WOONS BOS PSM ENE	10000	Portland
.....	ORW V16 WOONS BOS	10000	Portsmouth
.....	PVD V151 GAILS	10000	Princeton
.....	(1) GON V374 CREAM V16	10000	Richmond
.....	GON BAF V146 ALB	10000	Rochester
.....	GON BDL V205 TRESA	10000	Stewart
.....	GON BAF V146 ALB	10000	Syracuse
.....	(1) GON V374 CREAM V16 DIXIE V276 ARD	10000	Trenton
.....	GON V374 CREAM	10000	Waterbury-Oxford
.....	GON V374 V16 CCC	10000	Westhampton Beach
.....	GON V374 CREAM BDR BDR288 RYMES	10000	White Plains
.....	HFD PWL V106 LHY	5000	Wilkes-Barre
.....	ORW V14 GRAYM	10000	Worcester
Reading			
.....	ETX	3000	Allentown
.....	BOYER V12 HAR	4000	Harrisburg
.....	V39	4000	Lancaster
.....	FJC BWZ	5000	Newark
.....	PTW	5000	No.Philadelphia
.....	MXE 355 BUNTS	5000	Philadelphia
.....	V93	5000	Wilkes-Barre
.....	MXE V29 DQO	5000	Wilmington
Richmond			
.....	V286 STEIN	5000	Norfolk
.....	V33 HCM	6000	Norfolk
.....	V38 HCM	9000	Norfolk

TOWER ENROUTE CONTROL

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Approach Control Area (Including Satellites)	Route	Highest Altitude	Destination
Roanoke	..... V16	5000	Patuxent River NAS
	..... V33	5000	Patuxent River
	..... V376	8000	Washington
	..... V155	4000	Washington
	..... BRV	5000	Washington
	..... PSK V45	7000	Greensboro
	..... V103	10000	Greensboro
Rochester	..... V31 V14	10000	Albany
	..... V119 GEE V252	8000	Binghamton
	..... V2	10000	Buffalo
	..... V119 GEE V464 DKK V14 MENTO	10000	Cleveland
	..... V119 GEE V464	10000	Dunkirk
	..... V147	8000	Elmira
	..... V119 GEE V464 DKK V14	10000	Erie
	..... V34 BEEPS	8000	Ithaca
	..... V2 BUF V115	6000	Jamestown
	..... V119 GEE V464 LANGS V115	10000	Jamestown
	..... V510 EHMAN	10000	Niagara Falls
Syracuse	..... V119 GEE V464 DKK V14 ERI V37 (Overflight traffic only)	10000	Pittsburgh
	..... V2	10000	Syracuse
	..... V119 GEE V464 DKK V14 ERI V43	10000	Youngstown
Syracuse	..... VESPE V14 ALB	10000	Albany
	..... V483 SHERB V14 ALB GDM V431 LOBBY	10000	Bedford
	..... V29	6000	Binghamton
	..... V483 SHERB V14 ALB GDM V431 REVER	10000	Boston
	..... ALB	10000	Bradley
	..... RKA V433 PETER V270 ATHOS V44 DENNA	10000	Bridgeport
	..... (3) RKA V433 TRESA V123 HAARP	10000	Danbury
	..... V35	8000	Elmira
	..... V29 V428	8000	Elmira
	..... ALB V130 BDL GON	10000	Groton
	..... ALB	10000	Hartford
	..... ALB V130 BDL V405 PVD V151 GAILS	10000	Hyannis
	..... ALB V130 BDL V405 MVY	10000	Martha's Vineyard
	..... ALB V130 BDL V405 MVY	10000	Nantucket
	..... V483 SHERB V14 ALB GDM V431 LOBBY	10000	Norwood
	..... CAM CON	10000	Portland
	..... ALB V130 BDL V405 PVD	10000	Providence
	..... ALB V130 BDL V405 PVD V151 GAILS	10000	Provincetown
	..... V14	10000	Rochester
	..... ALB V130 MOLDS	10000	Worcester
Washington	..... DIRECT	4000	Baltimore
	..... DIRECT	3000	Dulles
	..... V265	5000	Harrisburg
	..... V265 V457 LRP	5000	Lancaster
	..... V265 EMI V419 MXE ARD V214 METRO (-180 kts only)	7000	Newark
	..... DIRECT	3000	Patuxent River NAS
	..... V123 V433 DQO	7000	Philadelphia
	..... V155 COATT	8000	Richmond
	..... BRV	6000	Richmond
	..... V286	5000	Richmond
	..... BAL V378 MXE V3 SBJ TEB (-180 kts only)	7000	Teterboro
Westchester (See New York/Westchester)			
Wilkes-Barre	..... V164 ETX	5000	Allentown
	..... V29	8000	Binghamton
	..... V149	8000	Binghamton
	..... V499	7000	Binghamton
	..... V147	8000	Elmira
	..... V36	8000	Elmira
	..... V106 SEG V31	8000	Harrisburg
	..... HZL RAV	8000	Harrisburg
	..... V93	6000	Lancaster
	..... V613 FJC BWZ (Non jets only)	5000	Newark
	..... V613 FJC BWZ (Jets only)	6000	Newark
	..... V93	6000	Reading

NORTH AMERICAN ROUTES**NORTH AMERICAN ROUTES FOR NORTH ATLANTIC TRAFFIC (NAR)**

"NORTH AMERICAN ROUTE PROGRAM (NRP)."

Introduction

(a) The North American Route Program (NRP) is a joint FAA and NAV CANADA program, the objective of which is to harmonize and adopt common procedures, to the extent possible, for application to random route flight operations at and above FL 290 within the conterminous U.S. and Canada.

(b) The NRP will be implemented through various phases with the end goal of allowing all international and domestic flight operations to participate in the NRP throughout the conterminous U.S., Alaska, and Canada.

(c) Flights may participate in the NRP under specific guidelines and filing requirements:

1. provided the flight originates and terminates within conterminous U.S. and Canada; or,
2. for North Atlantic international flights operating within the North American Route (NAR) System.

FAA/NAV CANADA Common Procedures

The following common FAA and NAV CANADA procedures apply:

(a) Flights to operate at or above FL 290.

(b) For that portion of flight within 200 NM of the departure or destination airport, flights shall be filed and operated via Standard Instrument Departures (SID), Departure Procedures (DP), Standard Terminal Arrival Routes (STAR) or published Preferred IFR Routes. If none of the above are available, airways may be used.

(c) NRP flights are not normally subject to routing restrictions such as published Preferred IFR Routes or airways, beyond a 200 NM radius of both the departure and destination airports.

(d) Flight planning requirements are:

1. routes shall contain at least one significant point in each delegated area of airspace jurisdiction for each FAA Air Route Traffic Control Center (ARTCC) or Canadian FIR/CTA;

2. significant points may be a navigational aid or waypoint defined in fix-radial distance (FRD) format from a navigational aid. Within Canadian airspace a significant point may also be a coordinate described in degrees and minutes of latitude/longitude;

3. for routes that cross the U.S./Canadian border, a significant point within 30 NM of either side of the border shall be filed;

4. significant points should be filed for all turnpoints;

5. route(s) shall avoid active Class F airspace;

6. "NRP" shall be entered in the Remarks section of the flight plan; and

7. flight plans to be filed at least one hour prior to departure.

(e) In the event that a NRP aircraft has to be recleared due to weather or tactical reasons, ATC will attempt to return the aircraft to the original NRP routing as soon as practical. Aircraft that depart from the NRP routing due to a pilot request or an ATC clearance authorizing a direct routing will be considered as a non participant of the NRP.

(f) Unless published routing restrictions are in effect, North Atlantic International flights planning to operate within the NAR System may file NRP routes beyond 200 NM of the NAR identified system airport and the published Inland Navigation Fixes (INFs).

Specific FAA Requirements

The following specific FAA requirements apply:

(a) Flights may not be filed via a DP/STAR within offshore transition areas (12 NM or more off the U.S. shoreline).

(b) Flights may be filed and flown on the complete transition of DPs and/or STARs for specific airports in lieu of the 200 NM route planning requirement described in Common Procedures, paragraph "b" above. For listing of the airports refer to the current FAA Advisory Circular-NRP.

(c) Flights not meeting the above guidelines are to be requested through the FAA nonpreferred route programs. Those requests will be approved/disapproved on a workload permitting basis.

NORTH AMERICAN ROUTE (NAR) SYSTEM**GENERAL**

a. The objectives of the NAR System are as follows:

1. To expedite flight planning.
 2. To reduce the complexity of route clearances and thereby minimize the confusion and error potential inherent in lengthy transmissions and readbacks; and
 3. To minimize the time spent in the route clearance delivery function.
- b. The NAR System is designed to accommodate major airports in North America where the volume of North Atlantic (NAT) traffic and route complexity dictate a need to meet the above objectives. It is for the use of traffic entering/exiting the NAT and consists of a series of pre-planned routes from/to coastal fixes and identified system airports. Most of the routes are divided into two portions:
1. Common Portion: That portion of the route between specified coastal fix and a specified inland navigation fix (INF). Some routes have a common portion only.
 2. Non-common Portion: That portion of the route between a specified INF and a system airport. The routes are within the high level airspace structure with a transition to/from system airports.

c. The routes are prefixed by the abbreviation "N" with the numbering for the common portions orientated geographically from south to north. The ODD numbers have eastbound applications while the EVEN numbers apply to westbound. Following a one- to three-digit number, an alpha character indicates the validation codes and forms part of the route identifier. Validation codes are associated to amendments to the common routes only and not to non-common route portions.

d. Since a primary function of the NAR system is to compliment the NAT traffic flow; a limited number of NAR routes, appropriate for the coastal fixes serving the organized OTS and the domestic traffic organization, are included in the daily NAT/OTS message published by the Gander and Shamwick Oceanic Area Centers.

e. Aircraft can only join the NAR system:

1. At an identified coastal fix; or
2. On departure from one of the identified system airports; or
3. At an identified INF.

FLIGHT PLANNING—GENERAL**Westbound**

a. Westbound routes begin at the coastal fixes, thence along common route portions to an INF and then fan out along non common routes to selected system airports;

b. For aircraft proceeding to an identified system airport and the route of flight to destination is described by a single NAR designator, use the designator;

c. For aircraft proceeding to a non system airport but the route of flight is described by the common route portion to an identified INF, use the designator to the INF followed by a detailed routing to the destination.

Eastbound

a. Eastbound routes only have a common portion from the INF to a coastal fix;

b. When the route of flight is described by a single NAR designator, use the designator;

c. For aircraft departing from a non system airport, file via an appropriate detailed routing to the applicable INF and thence via the common portion to the coastal fix using the NAR designator;

General

For those cases not described above, a detailed routing is required.

NAR REQUIREMENT**General**

a. Generally there is no requirement to flight plan and operate using the NAR system. However ATC requires eastbound aircraft intending to operate on the NAT OTS and operating wholly on or south of a line between the intersections BAREE and DOTTY to flight plan and operate using one of the NARs published on the daily OTS Message.

b. NARs may be assigned by air traffic control for the tactical management of air traffic in Canadian domestic airspace.

c. For operators who elect not to use the NAR system, the rules of the NRP apply.

ROUTE CLEARANCES

a. For aircraft operating within the NAR System, the ATC routing clearance and pilot readback will be indicated by the NAR designator, e.g., "North American Route 105B";

b. For aircraft operating in the NAR System, but only using the common route portion, the ATC routing clearance and pilot readback will be indicated by the NAR designator followed by the detailed routing;

c. For aircraft not operating in the NAR System, the ATC routing clearance and pilot readback will be via a detailed route;

d. Aircraft cleared to a system airport via a NAR designator are to follow the common and the non-common portion of the route to a system airport. If either the common or non-common portion of the issued NAR is incompatible or unacceptable, the pilot is to advise ATC accordingly.

NORTH AMERICAN ROUTES**DOCUMENTATION**

- a. It is expected that the following NAR documentation will be carried on the flight deck of each aircraft operating within the NAR system:
1. The current publications of NAV CANADA Canadian Flight Supplement; or Federal Aviation Administration Airport/Facility Directory Northeast U.S. (AFDNE); or another product which provides the current NAR; and
 2. the information in the current NAT/OTS message.
- b. Changes to the NAR routes are advertised in the monthly publication Notices to Airmen Publication (NTAP).

COMMON PROCEDURES FOR RADIO COMMUNICATIONS FAILURE

- a. The following procedures are intended to provide general guidance for North Atlantic (NAT) aircraft experiencing a communications failure. These procedures are intended to complement and not supersede state procedures/regulations. It is not possible to provide guidance for all situations associated with a communications failure.
1. If so equipped, the pilot of an aircraft experiencing a two-way radio communications failure shall:
 - i. operate the secondary radar transponder on identity Mode A) Code 7600 and Mode C; and
 - ii. attempt to contact any ATC facility or another aircraft and inform them of the difficulty and request they relay information to the ATC facility with whom communications are intended.

b. Communications failure prior to entering NAT oceanic airspace

1. If operating with a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the cleared oceanic entry point, level and speed and proceed in accordance with the received and acknowledged oceanic clearance. Any level or speed changes required to comply with the oceanic clearance shall be completed within the vicinity of the oceanic entry point.
2. If operating without a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the first oceanic entry point, level and speed, as contained in the filed flight plan and proceed via the filed flight plan route to landfall. That first oceanic level and speed shall be maintained to landfall.

c. Communications failure prior to exiting NAT oceanic airspace**1. Cleared on flight plan route**

The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to landfall. After passing the last specified oceanic route point, conform with the relevant State procedures/regulations.

2. Cleared on other than flight plan route

The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall. After passing this point, rejoin the filed flight plan route by proceeding directly to the next significant point ahead of the track of the aircraft as contained in the filed flight plan. Where possible use published ATS route structures, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to the last specified oceanic route point. After this point conform with the relevant State procedures/regulations.

NORTH AMERICAN ROUTES (NAR)

The following listing divides the NAR Route descriptions into two sections according to the direction of flight (eastbound or westbound). Each section is subdivided according to the route portion (common or non-common). The common portion describes the NAR route between the Coastal Fix and the Inland Navigational Facility/Fix. The non-common portion describes the route between the NAR route system airport being used and the Inland Navigational Facility/Fix.

COMMON PORTION (EASTBOUND)

NAR Designator	Inland Navigation Facility/Fix	Route Description	Coastal Fix
N5B	SIE	B24 LYNUS	SLATN
N7A	MANTA	OWENZ LINND R56	SLATN
N13C	SIE	B24 LYNUS	JOBOC
N15B	MANTA	OWENZ LINND R56 KENDA	JOBOC
N17B	VITOL	Direct	CARAC
N19B	ALLEX	Direct	CARAC
N21C	VITOL	LOMPI	JAROM
N23E	WHALE	LOMPI	JAROM
N25B	EBONY	LOMPI	JAROM
N27A	VITOL	NANSO	RAFIN
N29B	WHALE	NANSO	RAFIN
N31E	KANNI	NANSO	RAFIN
N33C	MIILS	Direct	BANCS
N35A	WHALE	Direct	BANCS
N37B	KANNI	Direct	BANCS
N39A	BRADD	Direct	BANCS
N41C	MIILS	Direct	BANCS
N43A	KANNI	Direct	COLOR
N45B	BRADD	Direct	COLOR

NAR Designator	Inland Navigation Facility/Fix	Route Description	Coastal Fix
N47A	TUSKY	Direct	COLOR
N49A	MIILS	Direct	COLOR
N51B	KANNI	Direct	YYT
N53B	BRADD	Direct	YYT
N55B	TUSKY	Direct	YYT
N57B	ALLEX	Direct	YYT
N59A	MIILS	Direct	YYT
N61B	BRADD	Direct	VIXUN
N63B	TUSKY	Direct	VIXUN
N65B	ALLEX	Direct	VIXUN
N67B	MIILS	Direct	VIXUN
N75B	BRADD	Direct	YQX
N77B	TUSKY	Direct	YQX
N79B	ALLEX	Direct	YQX
N81B	EBONY	Direct	YQX
N83B	MIILS	Direct	YQX
N85A	CEFOU	Direct	YQX
N91B	TUSKY	Direct	CYMON
N93B	ALLEX	Direct	CYMON
N95B	EBONY	Direct	CYMON
N97B	MIILS	Direct	CYMON
N99A	CEFOU	Direct	CYMON
N105B	TUSKY	Direct	DOTTY
N107B	ALLEX	Direct	DOTTY
N109B	EBONY	Direct	DOTTY
N111B	TOPPS	Direct	DOTTY
N113B	MIILS	Direct	DOTTY
N115B	BAREE	Direct	DOTTY
N121B	ALLEX	Direct	YAY
N123A	EBONY	Direct	YAY
N125A	TOPPS	Direct	YAY
N127A	MIILS	Direct	YAY
N129B	BAREE	Direct	YAY
N135B	EBONY	Direct	REDBY
N137B	TOPPS	Direct	REDBY
N139C	TAFFY	Direct	REDBY
N141B	BAREE	Direct	REDBY
N149B	TOPPS	Direct	STEAM
N151E	MIILS	Direct	STEAM
N153C	TAFFY	Direct	STEAM
N155A	ANCER	Direct	STEAM
N161E	TOPPS	Direct	VALIE
N163E	MIILS	Direct	VALIE
N165E	TAFFY	Direct	VALIE
N167E	QUBIS	Direct	VALIE
N169A	ANCER	Direct	VALIE
N171A	YBG	Direct	VALIE
N173B	TOPPS	Direct	FOXXE
N175C	MIILS	Direct	FOXXE
N177C	TAFFY	Direct	FOXXE
N179C	QUBIS	Direct	FOXXE
N181E	ANCER	Direct	FOXXE
N183C	YBG	Direct	FOXXE
N185A	RJ	Direct	FOXXE
N193E	MIILS	Direct	HO
N195C	TAFFY	Direct	HO
N197C	QUBIS	Direct	HO
N209B	TAFFY	Direct	YDP
N211C	QUBIS	Direct	YDP
N225B	TAFFY	Direct	LOMTA
N227B	QUBIS	Direct	LOMTA

NORTH AMERICAN ROUTES

COMMON PORTION (WESTBOUND)

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility/Fix
N10A	SLATN	Direct	BERGH
N12B	SLATN	J97	LACKS
N14A	JOBOC	Direct	BERGH
N16A	JOBOC	Direct	SAILE
N18C	DOVEY	Direct	SAILE
N36E	CARAC	Direct	VITOL
N38E	CARAC	Direct	WHALE
N40E	CARAC	Direct	KANNI
N42B	CARAC	Direct	BRADD
N44B	CARAC	Direct	TOPPS
N46E	JAROM	LOMPI	WHALE
N48E	JAROM	LOMPI	KANNI
N50E	JAROM	LOMPI	BRADD
N52E	JAROM	LOMPI	TUSKY
N54E	JAROM	LOMPI	TOPPS
N56E	RAFIN	NANSO	VITOL
N58B	RAFIN	NANSO	WHALE
N60B	RAFIN	NANSO	KANNI
N62A	RAFIN	Direct	BRADD
N64C	RAFIN	Direct	TUSKY
N66C	BANCS	Direct	MIILS
N68C	BANCS	Direct	VITOL
N70B	BANCS	Direct	WHALE
N72B	BANCS	Direct	KANNI
N74B	BANCS	Direct	BRADD
N76A	BANCS	Direct	TUSKY
N78A	BANCS	Direct	MIILS
N80B	COLOR	Direct	WHALE
N82B	COLOR	Direct	KANNI
N84B	COLOR	Direct	BRADD
N86B	COLOR	Direct	TUSKY
N88A	COLOR	Direct	MIILS
N94A	YYT	Direct	KANNI
N96A	YYT	Direct	BRADD
N98A	YYT	Direct	TUSKY
N100B	YYT	Direct	ALLEX
N102B	YYT	Direct	MIILS
N112B	VIXUN	Direct	TUSKY
N114C	VIXUN	Direct	ALLEX
N116A	VIXUN	Direct	MIILS
N118A	VIXUN	Direct	MIILS
N124B	YQX	Direct	TUSKY
N126B	YQX	Direct	ALLEX
N128B	YQX	Direct	EBONY
N130C	YQX	Direct	MIILS
N142B	CYMON	Direct	ALLEX
N144B	CYMON	Direct	EBONY
N146B	CYMON	Direct	TOPPS
N148B	CYMON	Direct	MIILS
N160C	DOTTY	Direct	ALLEX
N162B	DOTTY	Direct	TOPPS
N164B	DOTTY	Direct	MIILS
N168B	DOTTY	Direct	YXU
N170E	DOTTY	YRI	COVAN
N180B	YAY	Direct	ALLEX
N184B	YAY	Direct	TOPPS
N186C	YAY	Direct	TOPPS
N188B	YAY	Direct	YRI
N190C	YAY	YRI	COVAN
N200B	REDBY	Direct	ALLEX
N202B	REDBY	Direct	TOPPS
N204B	REDBY	Direct	TAFFY
N206C	REDBY	Direct	YRI
N208F	REDBY	YRI	COVAN
N220B	STEAM	Direct	TOPPS
N224E	STEAM	BOBBS	TAFFY
N228B	STEAM	Direct	YRI

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility/Fix
N230E	STEAM	YRI	COVAN
N240C	VALIE	Direct	TOPPS
N242B	VALIE	Direct	TAFFY
N248C	VALIE	Direct	YBC
N250F	VALIE	YBC YRI	COVAN
N254A	VALIE	ROBBE	MOFAT
N258A	VALIE	ROBBE MOFAT YOW J559	SYR
N260A	VALIE	ROBBE	MT
N264A	FOXXE	Direct	TAFFY
N268B	FOXXE	Direct	QUBIS
N270B	FOXXE	Direct	YBC
N272E	FOXXE	YBC YRI	COVAN
N276A	FOXXE	SPOTE ROBBE	MOFAT
N280A	FOXXE	SPOTE ROBBE MOFAT YOW J559	SYR
N282A	FOXXE	SPOTE	MT
N284B	HO	Direct	TAFFY
N288C	HO	Direct	QUBIS
N292C	HO	Direct	YBC
N294E	HO	YBC YRI	COVAN
N296E	HO	KELVI	SYR*
N302C	HO	SPOTE ROBBE	MOFAT
N306C	HO	SPOTE ROBBE MOFAT YOW J559	SYR
N308E	HO	YWK	MT
N312A	HO	MT YUY	SSM
N322B	YDP	Direct	TAFFY
N326B	YDP	Direct	QUBIS
N328C	YDP	Direct	YBC
N332C	YDP	Direct	COVAN*
N334E	YDP	YBC YRI	COVAN
N338C	YDP	J583 YWK	MOFAT
N344B	YDP	YMX	SYR*
N346A	YDP	BROME NOWAA	MT
N352C	YDP	BROME NOWAA YOW MT J559	SYR
N354C	YDP	J583 YWK MOFAT YOW YUL J559	SYR
N356C	YDP	YKL	ROUND
N358B	YDP	JOVIE HENDY SELBO CANSO	SSM
N362B	YDP	YKL ROUND CANSO	SSM
N372C	LOMTA	Direct	TAFFY
N374C	LOMTA	Direct	QUBIS
N376C	LOMTA	Direct	YBC
N378F	LOMTA	Direct	COVAN
N382H	LOMTA	YBC YRI	COVAN
N386G	LOMTA	YMX	SYR*
N392E	LOMTA	YKL ROBBE	MOFAT
N396C	LOMTA	TEALS	VANSI
N398B	LOMTA	YKL ROBBE MOFAT YOW J559	SYR
N402E	LOMTA	TEALS VANSI STAFE	SSM
N412B	LAKES	Direct	TAFFY
N414C	LAKES	HINGE TEALS	MOFAT
N424E	LAKES	MCKEE GELLS	MT
N428C	LAKES	MCKEE GELLS MT YOW J559	SYR
N432B	LAKES	HINGE TEALS MOFAT YOW J559	SYR
N434C	LAKES	MCKEE MEMSO GRAMP LORNE	SSM
N464E	LOPVI	KLIPS	MT
N468E	LOPVI	KLIPS MT YOW J559	SYR
N472E	LOPVI	PELSI SOCAN VETRO	SSM
N484C	RODBO	SEMTO HENDY	MT
N492B	ELSET	COPUR	ROUND
N494C	RODBO	SEMTO HENDY YOW J559	SYR
N496C	RODBO	SEMTO VEPTU PEMLU	SSM
N512C	JELCO	Direct	VANSI
N514C	JELCO	VANSI YOW J559	SYR
N516H	JELCO	HELMO YMO JARRO	SSM
N528A	FEDDY	GW PELEE YXZ	SSM

* NOTE:

Routes through Bagotville (YBG) Military Advisory Areas (CYAs) only available from 2300 UTC (DT2200 UTC) Fri to 1100 UTC (DT 1000 UTC) Mon unless declared active by NOTAM.

NORTH AMERICAN ROUTES

NON-COMMON PORTION (WESTBOUND)

VIA ALLEX

Inland Navigation Facility/Fix	Non-Common Portion	Destination
ALLEX	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
ALLEX	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
ALLEX	ENE NELIE J75 MXE V378 BAL	BALTIMORE
ALLEX	SCUPP	BOSTON
ALLEX	EMJAY J174	CHARLESTON, SC
ALLEX	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
ALLEX	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
ALLEX	SEAER J79 LFV J174 HTO J121 SIE	DOVER
ALLEX	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
ALLEX	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
ALLEX	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
ALLEX	ENE Parch Arrival	KENNEDY
ALLEX	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
ALLEX	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
ALLEX	HANAA ALB V213 SAX	NEWARK
ALLEX	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
ALLEX	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
ALLEX	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
ALLEX	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
ALLEX	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST LOUIS
ALLEX	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA BERGH

Inland Navigation Facility/Fix	Non-Common Portion	Destination
BERGH	L454 OWENZ DRIFT J121 SIE	DOVER
BERGH	L454 J62 RBV RBV289 radial V457 LRP V143 MULRR AML	DULLES
BERGH	L454 OWENZ CAMRN	KENNEDY
BERGH	L454 OWENZ MANTA V276 GAMBY	MCGUIRE
BERGH	L454 OWENZ V139 BRIGS V577 VCN Cedar Lake Arrival	PHILADELPHIA

VIA BRADD

Inland Navigation Facility/Fix	Non-Common Portion	Destination
BRADD	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
BRADD	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
BRADD	BOS J75 MXE V378 BAL	BALTIMORE
BRADD	SCUPP	BOSTON
BRADD	LFV J174	CHARLESTON, SC
BRADD	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
BRADD	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
BRADD	LFV J174 HTO J121 SIE	DOVER
BRADD	BOS J77 SAX J6 LRP Delro Arrival	DULLES
BRADD	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
BRADD	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
BRADD	PLYMM Parch Arrival	KENNEDY
BRADD	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE

NORTH AMERICAN ROUTES**Inland Navigation****Facility/Fix****Non-Common Portion****Destination**

BRADD	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
BRADD	BOS BAF Shaff Arrival	NEWARK
BRADD	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
BRADD	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
BRADD	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
BRADD	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
BRADD	BOS J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
BRADD	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA COVAN**Inland Navigation****Facility/Fix****Non-Common Portion****Destination**

COVAN	ALB J37 J75 MXE V378 BAL	ANDREWS
COVAN	ALB J6 SAX J77 PTW J48 ODF FLCON Arrival	ATLANTA
COVAN	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
COVAN	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON, SC
COVAN	ALB PWL CMK J75 GVE LYH SUDSY Arrival	CHARLOTTE
COVAN	ALB J6 SAX J6 LIT BYP Arrival	DALLAS/FT. WORTH
COVAN	ALB J37 JFK CYN SIE	DOVER
COVAN	ALB J6 LRP DELRO Arrival	DULLES
COVAN	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS J79 OMN FISEL Arrival	FT. LAUDERDALE
COVAN	ALB IGN IGN Arrival	KENNEDY
COVAN	ALB DNY LYH V93 LVZ V147 MAZIE	MCGUIRE
COVAN	ALB PWL CMK J75 CAE J51 SAV J103 OMN HILEY Arrival	MIAMI
COVAN	HANAA ALB V213 SAX	NEWARK
COVAN	ALB PWL CMK J75 CAE J75 DUNKN AMG LESE Arrival	ORLANDO
COVAN	ALB DNY SLATT Arrival	PHILADELPHIA
COVAN	ALB J49 HNK HNK271 radial J190 SLT GRACE Arrival	PITTSBURGH
COVAN	ALB PWL CMK J75 TAY DADES Arrival	TAMPA

VIA EBONY**Inland Navigation****Facility/Fix****Non-Common Portion****Destination**

EBONY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
EBONY	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
EBONY	ENE NELIE J75 MXE V378 BAL	BALTIMORE
EBONY	SCUPP	BOSTON
EBONY	EMJAY J174	CHARLESTON, SC
EBONY	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
EBONY	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT.WORTH
EBONY	SEAER J79 LFV J174 HTO J121 SIE	DOVER
EBONY	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
EBONY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
EBONY	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
EBONY	ENE Parch Arrival	KENNEDY
EBONY	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
EBONY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
EBONY	HANAA ALB V213 SAX	NEWARK
EBONY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
EBONY	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
EBONY	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
EBONY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
EBONY	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
EBONY	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

NORTH AMERICAN ROUTES

VIA KANNI

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
KANNI	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
KANNI	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
KANNI	BOS J75 MXE V378 BAL	BALTIMORE
KANNI	SCUPP	BOSTON
KANNI	LFV J174	CHARLESTON, SC
KANNI	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
KANNI	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
KANNI	LFV J174 HTO J121 SIE	DOVER
KANNI	BOS J77 SAX J6 LRP Delro Arrival	DULLES
KANNI	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
KANNI	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
KANNI	PLYMM Parch Arrival	KENNEDY
KANNI	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
KANNI	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
KANNI	BOS BAF Shaff Arrival	NEWARK
KANNI	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
KANNI	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
KANNI	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
KANNI	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
KANNI	BOS J77 SAX J80 VHP Vandalia Arrival	ST.LOUIS
KANNI	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA LACKS

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
LACKS	J97 ACK SCUPP	BOSTON

VIA MIILS

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
MIILS	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
MIILS	YOW J553 ECK FNT PAITN Arrival	CHICAGO
MIILS	YMX J546 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
MIILS	YMX J546 YSO J558 YXU J545 DJB J29 PVX J131 LIT BYP	DALLAS/FT. WORTH
MIILS	YMX J546 YSO J597 YQO V464 Spica Arrival	DETROIT
MIILS	YMX J546 YSO J558 YXU J545 DJB J29 PVX J131 LIT J180 DAS Daisetta Arrival	HOUSTON
MIILS	VLV J509 V352 OMBRE Ombre Arrival	MONTREAL/TRUDEAU
MIILS	ATENE CATOG Catog Arrival	MONTREAL/MIRABEL
MIILS	YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS*
MIILS	YMX J546 V300 YSO J37	TORONTO

* NOTE:

St. Louis route useable only for aircraft at or above FL350.

NORTH AMERICAN ROUTES

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VIA MOFAT

Inland Navigation

Facility/Fix

Non-Common Portion

Destination

MOFAT	ALB J37 J75 MXE V378 BAL	ANDREWS
MOFAT	TVC OBK J73 BNA Rome Arrival	ATLANTA
MOFAT	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
MOFAT	ALB J6 SAX J77 PTW J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON
MOFAT	ALB PWL CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
MOFAT	SEDOT ASP PAITN Arrival	CHICAGO
MOFAT	YXI J597 YSO J558 YXU J545 DJB J38 APE Cince Arrival	CINCINNATI
MOFAT	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
MOFAT	SMARE ECK POLAR Polar Arrival	DETROIT
MOFAT	ALB J37 JFK CYN SIE	DOVER
MOFAT	ALB J6 LRP Delro Arrival	DULLES
MOFAT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J93 WEAVR J121 CHS J79 OMN Fisel Arrival	FT. LAUDERDALE
MOFAT	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
MOFAT	ALB IGN IGN Arrival	KENNEDY
MOFAT	ALB DNY LHY V93 LVZ V147 MAZIE	MCGUIRE
MOFAT	ALB PWL CMK J75 CAE J51 SAV J103 OMN HILEY Arrival	MIAMI
MOFAT	OBRET J570 YMX Mirabel Arrival	MONTREAL/MIRABEL
MOFAT	OBRET J570 YMX Antag Arrival	MONTREAL/TRUDEAU
MOFAT	ALB PWL CMK J75 CAE DUNKN AMG Leese Arrival	ORLANDO
MOFAT	ALB DNY Slatt Arrival	PHILADELPHIA
MOFAT	ALB J49 HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
MOFAT	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
MOFAT	ALB CMK J75 Dades Arrival	TAMPA
MOFAT	YXI J597 V216 YSO JV37	TORONTO

VIA MT

Inland Navigation

Facility/Fix

Non-Common Portion

Destination

MT	ALB J37 J75 MXE V378 BAL	ANDREWS
MT	TVC OBK J73 BNA Rome Arrival	ATLANTA
MT	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
MT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON
MT	ALB PWL CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
MT	SSM PAITN Arrival	CHICAGO
MT	YXI J597 YSO YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
MT	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
MT	SEDOT ECK POLAR POLAR ARRIVAL	DETROIT
MT	ALB J37 JFK CYN SIE	DOVER
MT	ALB J6 LRP Delro Arrival	DULLES
MT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J93 WEAVR J121 CHS J79 OMN Fisel Arrival	FT. LAUDERDALE
MT	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
MT	ALB IGN IGN Arrival	KENNEDY
MT	ALB DNY LHY V93 LVZ V147 MAZIE	MCGUIRE
MT	ALB PWL CMK J75 CAE J51 SAV J103 OMN Hiley Arrival	MIAMI
MT	J570 YMX Mirabel Arrival	MONTREAL/MIRABEL
MT	J570 YMX Antag Arrival	MONTREAL/TRUDEAU
MT	ALB PWL CMK J75 CAE J75 DUNKN AMG Leese Arrival	ORLANDO
MT	ALB DNY Slatt Arrival	PHILADELPHIA
MT	ALB J49 HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
MT	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
MT	ALB CMK J75 TAY Dades Arrival	TAMPA
MT	YXI J597/V216 YSO V37	TORONTO

NORTH AMERICAN ROUTES

VIA NUCAR

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
NUCAR	NEPTA J58 AEX Scurry Arrival	DALLAS/FT WORTH
NUCAR	CRANS Fisel Arrival	FT. LAUDERDALE
NUCAR	JORAY Hiley Arrival	MIAMI
NUCAR	BAIRN Goofy Arrival	ORLANDO
NUCAR	BRDGE Brdge Arrival	TAMPA
NUCAR	AYBID Frway Arrival	PALM BEACH

VIA QUBIS

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
QUBIS	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
QUBIS	ALB J6 SAX J77 PTW J48 MOL FLCON Arrival	ATLANTA
QUBIS	ENE NELIE J75 MXE V378 BAL	BALTIMORE
QUBIS	SCUPP	BOSTON
QUBIS	EMJAY J174	CHARLESTON, SC
QUBIS	ENE NELIE J75 GVE LYH Sudsy Arrival	CHARLOTTE
QUBIS	ALB J6 LIT BYP	DALLAS/FT. WORTH
QUBIS	ALB J6 LRP Delro Arrival	DULLES
QUBIS	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
QUBIS	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
QUBIS	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
QUBIS	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
QUBIS	ALB J49 HNK HNK271 radial J190 GRACE Grace Arrival	PITTSBURGH
QUBIS	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
QUBIS	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA ROUND

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
ROUND	TVC OBK J73 BNA Rome Arrival	ATLANTA
ROUND	SSM PAITN Arrival	CHICAGO
ROUND	YXI J597 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
ROUND	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
ROUND	YVO SEDOT ECK POLAR Polar Arrival	DETROIT
ROUND	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
ROUND	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
ROUND	YXI J597 V216 YSO V37	TORONTO

VIA SAILE

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
SAILE	ACK HTO J174 ATR085 radial ATR V308 OTT	ANDREWS
SAILE	ACK HTO RBV V230 J48 MOL FLCON Arrival	ATLANTA
SAILE	SCUPP	BOSTON
SAILE	ACK HTO J174	CHARLESTON, SC
SAILE	ACK HTO J121 SIE	DOVER
SAILE	ACK J62 RBV RBV289 radial V457 LRP Delro Arrival	DULLES
SAILE	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
SAILE	PLYMM Parch Arrival	KENNEDY
SAILE	ACK HTO J121 DRIFT V312 CYN	MCGUIRE
SAILE	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
SAILE	BOS BAF Shaff Arrival	NEWARK
SAILE	ACK HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
SAILE	ACK HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
SAILE	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
SAILE	NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

NORTH AMERICAN ROUTES

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VIA SSM

Inland Navigation

Facility/Fix

Non-Common Portion

Destination

SSM	GRB J101 BAE J89 OBK J73 BNA Rome Arrival	ATLANTA
SSM	PAITN Arrival	CHICAGO
SSM	J101 BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
SSM	GEP J114	DENVER
SSM	STL J101 LIT J180 DAS Daisetta Arrival	HOUSTON
SSM	EAU Eau Arrival	MINNEAPOLIS/ ST. PAUL
SSM	J548 TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS

VIA SYR

Inland Navigation

Facility/Fix

Non-Common Portion

Destination

SYR	FQM HAR V265 KOLBY PSB149 radial SHILO V93 BAL	ANDREWS
SYR	J59 PSB J78 HVQ J145 ODF FLCON Arrival	ATLANTA
SYR	FQM RAV V170 V499 TRISH	BALTIMORE
SYR	FQM HAR EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON, SC
SYR	J59 PSB J78 HVQ Johns Arrival	CHARLOTTE
SYR	J29 DJB JB3 APE Cince Arrival	CINCINNATI
SYR	J29 PXV J131 LIT BYP	DALLAS/FT. WORTH
SYR	HAR LRP V210 SPERY	DOVER
SYR	J59 PSB PSB151 SEG201 HYPER Delro	DULLES
SYR	J29 PXV J131 LIT J180 DAS Daisetta Arrival	HOUSTON
SYR	IGN KINGSTON Arrival	KENNEDY
SYR	LVZ V147 MAZIE	McGUIRE
SYR	HNK V167 HELON V213 SAX	NEWARK
SYR	CFB SLATT Arrival	PHILADELPHIA
SYR	J29 JHW YNG CUTTA	PITTSBURGH
SYR	J29 ROD VHP Vandalia Arrival	ST. LOUIS

VIA TAFFY

Inland Navigation

Facility/Fix

Non-Common Portion

Destination

TAFFY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TAFFY	ALB J6 SAX J77 PTW J48 MOL FLCON Arrival	ATLANTA
TAFFY	PQJ J55 ENE NELIE J75 MXE V378 BAL	BALTIMORE
TAFFY	SCUPP	BOSTON
TAFFY	EMJAY J174	CHARLESTON, SC
TAFFY	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TAFFY	ALB J6 SAX J6 LIT BYP	DALLAS/FT.WORTH
TAFFY	SEAER J79 LFV J174 HTO J121 SIE	DOVER
TAFFY	ALB J6 LRP Delro Arrival	DULLES
TAFFY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
TAFFY	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TAFFY	ENE Parch Arrival	KENNEDY
TAFFY	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MC GUIRE
TAFFY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TAFFY	HANAA ALB V123 SAX	NEWARK
TAFFY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TAFFY	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TAFFY	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TAFFY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TAFFY	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

NORTH AMERICAN ROUTES

VIA TOPPS

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
TOPPS	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TOPPS	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
TOPPS	ENE NELIE J75 MXE V378 BAL	BALTIMORE
TOPPS	SCUPP	BOSTON
TOPPS	EMJAY J174	CHARLESTON, SC
TOPPS	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TOPPS	YOW J553 ECK FNT PAITN Arrival	CHICAGO
TOPPS	YOW J546 YSO J558 YXU J545 DBJ J83 APE Cince Arrival	CINCINNATI
TOPPS	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
TOPPS	YOW J546 YSO J597 YQO V464 Spica Arrival	DETROIT
TOPPS	SEAER J79 LFV J174 HTO J121 SIE	DOVER
TOPPS	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
TOPPS	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisal Arrival	FT. LAUDERDALE
TOPPS	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TOPPS	ENE Parch Arrival	KENNEDY
TOPPS	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
TOPPS	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TOPPS	HANAA ALB V213 SAX	NEWARK
TOPPS	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TOPPS	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TOPPS	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TOPPS	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TOPPS	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
TOPPS	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA
TOPPS	OMBRE Ombre Arrival	MONREAL/TRUDEAU
TOPPS	VLV J565 V363 Catog Arrival	MONREAL/MIRABEL
TOPPS	YOW J546 V300 YSO V37	TORONTO

VIA TUSKY

Inland Navigation

Facility/Fix	Non-Common Portion	Destination
TUSKY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TUSKY	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
TUSKY	BOS J75 MXE V378 BAL	BALTIMORE
TUSKY	SCUPP	BOSTON
TUSKY	EMJAY J174	CHARLESTON, SC
TUSKY	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TUSKY	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
TUSKY	LFV J174 HTO J121 SIE	DOVER
TUSKY	BOS J77 SAX J6 LRP Delro Arrival	DULLES
TUSKY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisal Arrival	FT. LAUDERDALE
TUSKY	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TUSKY	PLYMM Parch Arrival	KENNEDY
TUSKY	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
TUSKY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TUSKY	BOS BAF Shaff Arrival	NEWARK
TUSKY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TUSKY	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TUSKY	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TUSKY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TUSKY	BOS J77 SAX J80 VHP Vandalia Arrival	ST.LOUIS
TUSKY	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

NORTH AMERICAN ROUTES

VIA VANSI

Inland Navigation**Facility/Fix****Non-Common Portion****Destination**

VANSI	TVC OBK J73 BNA Rome Arrival	ATLANTA
VANSI	SSM PAITN Arrival	CHICAGO
VANSI	YXI J597 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
VANSI	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
VANSI	YVO SEDOT ECK POLAR Polar Arrival	DETROIT
VANSI	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
VANSI	TVC OBX J71 RBS Vandalia Arrival	ST LOUIS
VANSI	YXI J597 V216 YSO V37	TORONTO

VIA VITOL

Inland Navigation**Facility/Fix****Non-Common Portion****Destination**

VITOL	ACK HTO J174 ATR085 radial ATR V308 OTT	ANDREWS
VITOL	ACK HTO RBV J230 J48 MOL FLCON Arrival	ATLANTA
VITOL	SCUPP	BOSTON
VITOL	ACK HTO J174	CHARLESTON, SC
VITOL	ACK HTO J121 SIE	DOVER
VITOL	ACK J62 RBV RBV289 radial V457 LRP Delro Arrival	DULLES
VITOL	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
VITOL	PLYMM Parch Arrival	KENNEDY
VITOL	ACK HTO J121 DRIFT V312 CYN	MCGUIRE
VITOL	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
VITOL	BOS BAF Shaff Arrival	NEWARK
VITOL	ACK HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
VITOL	ACK HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
VITOL	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
VITOL	NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA WHALE

Inland Navigation**Facility/Fix****Non-Common Portion****Destination**

WHALE	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
WHALE	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
WHALE	BOS J75 MXE V378 BAL	BALTIMORE
WHALE	SCUPP	BOSTON
WHALE	LFV J174	CHARLESTON, SC
WHALE	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
WHALE	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
WHALE	LFV J174 HTO J121 SIE	DOVER
WHALE	BOS J77 SAX J6 LRP V143 Delro Arrival	DULLES
WHALE	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
WHALE	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
WHALE	PLYMM Parch Arrival	KENNEDY
WHALE	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
WHALE	LFV J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
WHALE	BOS BAF Shaff Arrival	NEWARK
WHALE	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
WHALE	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
WHALE	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
WHALE	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
WHALE	BOS J77 SAX J80 VHP Vandalia Arriva	ST. LOUIS
WHALE	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

NORTH AMERICAN ROUTES

VIA YBC

Inland Navigation
Facility/Fix

Non-Common Portion

Destination

YBC	VBS POLTY YSO YXU J545 DJB J83 APE J186 SOT FLCON Arrival	ATLANTA
YBC	VBS SEDOT ECK FNT PAITN Arrival	CHICAGO
YBC	VBS POLTY YSO YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
YBC	VBS POLTY YSO YXU J545 DJB J29 PVX J131 LIT BYP	DALLAS/FT WORTH
YBC	VBS YXI YVV ECK POLAR Polar Arrival	DETROIT
YBC	VBS POLTY YSO YXU J545 DJB J29 PVX J131 LIT J180 DAS Daisetta Arrival	HOUSTON
YBC	BLAKK Catog Arrival	MONREAL/MIRABEL
YBC	BLAKK OMBRE Ombre Arrival	MONREAL/TRUDEAU
YBC	VBS YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS
YBC	YMX J546 V300 YSO V37	TORONTO

VIA YRI

Inland Navigation
Facility/Fix

Non-Common Portion

Destination

YRI	POLTY YSO YXU J545 DJB J83 APE J186 SOT FLCON Arrival	ATLANTA
YRI	SEDOT ASP PAITN Arrival	CHICAGO
YRI	POLTY YSO YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
YRI	POLTY YSO YXU J545 DJB J29 PVX J131 LIT BYP	DALLAS/FT WORTH
YRI	YXI YVV ECK POLAR Polar Arrival	DETROIT
YRI	POLTY YSO YXU J545 DJB J29 PVX J131 LIT J180 DAS Daisetta Arrival	HOUSTON
YRI	BLAKK Catog Arrival	MONREAL/MIRABEL
YRI	MUROP OMBRE Ombre Arrival	MONREAL/TRUDEAU
YRI	YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS
YRI	YMX J546 V300 YSO V37	TORONTO

VIA ZQA

Inland Navigation
Facility/Fix

Non-Common Portion

Destination

ZQA	BR22V DEKAL	FT LAUDERDALE
ZQA	BR49V FOWEE Fowee Arrival	MIAMI
ZQA	BR54V	PALM BEACH

RNAV Routing Pitch and Catch Points

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by **pitch** (entry into) and **catch** (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

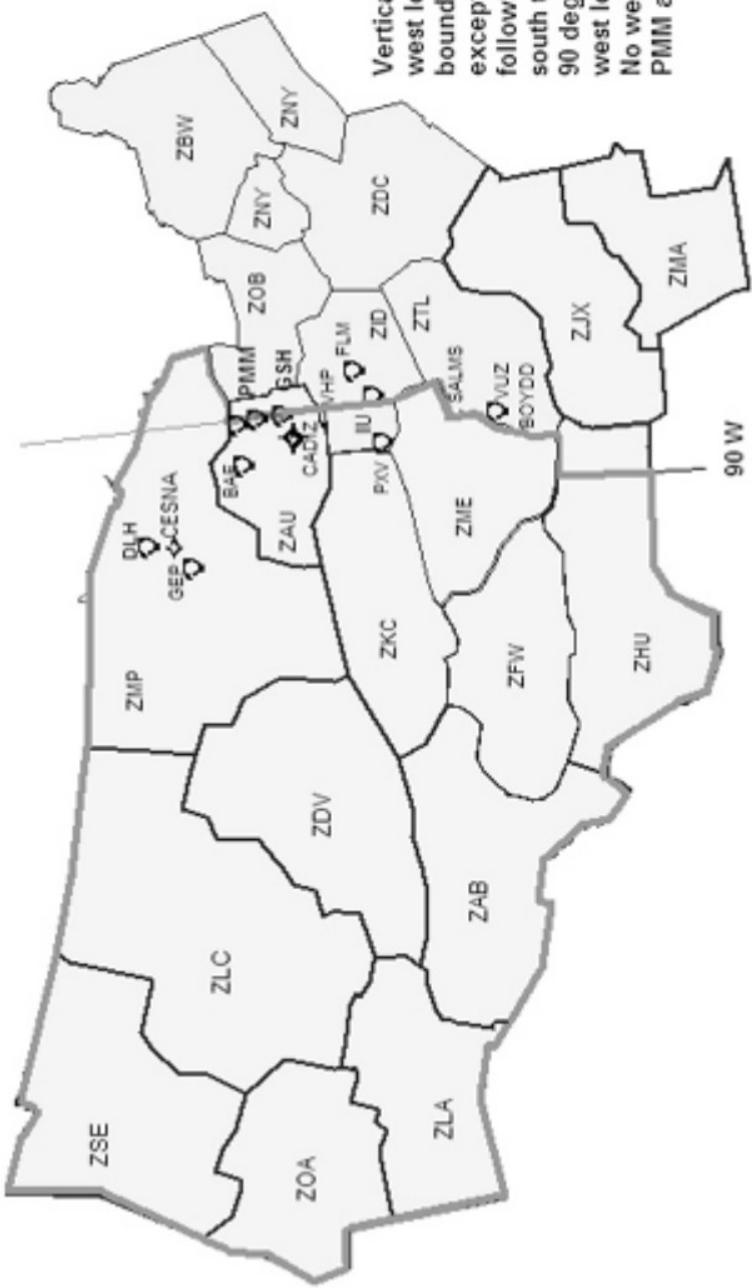
Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: <http://sua.faa.gov/sua/Welcome.do>. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.

High Altitude Redesign (HAR) Phase One Expansion Airspace

Except as noted, flights entering HAR expansion airspace may pitch at the airspace boundary, at the vertical pitch line, or at the fixes listed on the following page.

86 W



HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non-restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, MIE.

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque	ABQ, GUP, HANOS or ZUN
Austin	ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV
Boca Raton, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Burbank includes Santa Monica and Van Nuys	GMN, MARKS or DAG LAS or HEC EED or PMD BLH
Chicago Terminal Area	IOW, PLL275065, MZV or BAE
Dallas/Fort Worth Terminal Area	ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK ELD, SWB or Aircraft destined the Chicago terminal area Except MDW EAKER MIDEE BDF BRADFORD-STAR or MLC J105 SGF BDF BRADFORD-STAR
Denver Terminal Area	PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE, CABET, WEEDS, OR BINKE
Fort Lauderdale (or) Fort Lauderdale Executive	THNDR KPASA Q118 LENIE or THNDR KPASA Q116 CEEYA or THNDR KPASA Q110 FEONA or THNDR SMELZ Q106 GADAY or THNDR SMELZ Q106 BULZI
Houston Bush	LIT, ELD, MLC, JCT or Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE-RNAV STAR or Aircraft joining J37 to the northeast, GUSTI SID GUSTI Q22 CATLN or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42

Houston Hobby	LIT, ELD, MLC, JCT, or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42
Jacksonville, FL	TAY
Kansas City Terminal Area	TIFTO, CATTS or KENTN
Los Angeles, includes Ontario	GMN, RZS or DAG LAS or TRM EED or TRM PKE
Las Vegas	DOBNE, MOSBI, NICLE, TRALR or ZELOT
Long Beach includes Orange County	GMN SNS, EHF, LANDO or TRM PKE or TRM EED
Memphis	BNA, HAAWK, SALMS or SQS
Miami Terminal Area	WINCO KPASA Q118 LENIE or WINCO KPASA Q116 CEEYA or WINCO KPASA Q110 FEONA or WINCO SMELZ Q106 GADAY or WINCO SMELZ Q106 BULZI
Milwaukee	GREAS
Minneapolis Terminal Area*	ONL, ABR, FAR, OBH, OVR, FOD
New Orleans Terminal Area	AEX, MEI, SQS, KAPLN
Orlando Terminal Area	WEBBS BRUTS Q118 LENIE or WEBBS GULFR Q116 CEEYA or WEBBS BULZI Q106 GADAY or WEBBS FEONA or WEBBS BULZI
Palm Beach, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Palm Springs	TRM JOTNU BLD or TRM EED or TRM PKE
Phoenix	CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK
Portland, OR	PDT, TIMEE

Salt Lake City	HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI or TCH J56 CHE or TCH J173 EKR
Saint Louis	VIH, MAP, MYERZ, MCM or HLV MCI
San Antonio Terminal Area	FUZ, SJT, MQP, ABI or Aircraft North of LFK, LFK or Aircraft South of HUB, ELA or Aircraft South of LFK and North of HUB LCH
San Diego	TRM EED or TRM PKE or TRM JOTNU BLD
San Francisco Bay Area	GALLI, INSLO, HAROL JSICA
Oakland	GALLI, INSLO, HAROL JSICA
San Jose	GALLI or INSLO
Seattle	BLUIT
Southwest Florida Airports (RSW/FMY)	JOCKS KPASA Q118 LENIE or JOCKS KPASA Q116 CEEYA or JOCKS KPASA Q110 FEONA or JOCKS SMELZ Q106 GADAY or JOCKS SMELZ Q106 BULZI
Tampa Terminal Area	FEONA, BULZI or BRUTS Q118 LENIE or GULFR Q116 CEEYA or BULZI Q106 GADAY

*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

Catch Points for Airports Located Outside HAR Phase I Expansion Airspace

Atlanta Terminal Area	Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA or Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVAC or MEM or Aircraft through ZME airspace from ZID airspace west of a line from VHP to BWG, BNA or Aircraft through ZME airspace from ZID airspace east of a line from VHP to BWG, BWG or Aircraft through ZME airspace from ZFW airspace, MEM or MEI HONIE (RNAV)-STAR or PATYN HONIE (RNAV)-STAR
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Baltimore–Washington*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ
Boston*	GEP, CRL, ECK, IIU, BNA or VUZ
Buffalo*	GEP, CRL
Hartford Bradley*	GEP, CRL
Canton–Akron*	GIJ, VHP, GEP
Charlotte	BNA, VUZ
Cincinnati Terminal Area	BNA, PXV or Aircraft north of SLC, JOT or Aircraft over or south of SLC, ENL or SLC or SFO departures, ENL, JOT
Cleveland Terminal Area*	OBK
Detroit Terminal Area	BAE MKG POLAR–STAR or VHP FWA MIZAR–STAR
Detroit Young	VHP FWA or LAN SPRTN–STAR
Indianapolis Terminal Area	BIB, SPI, JOT
Louisville	ENL, MEM
Newark*	GEP, VHP, FLM, IIU, BNA, VUZ or IOW GIJ J554 CRL J584 SLT FQM
New York Kennedy*	GEP, VHP, FLM, IIU, BNA, VUZ or DBQ J94 PMM J70 LVZ LENDY–STAR
New York LaGuardia*	GIJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ
Philadelphia Terminal Area*	GIJ, GEP, VHP, BAE, WHETT, BNA, VUZ
Pittsburgh Terminal Area*	VHP, GIJ, BAE, GEP
Pontiac	LFD, LAN, VHP, FWA, GEP
Providence	JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ
Raleigh–Durham	FLM, IIU, BNA, VUZ
Toronto Terminal Area	ECK, SVM, SSM, GEP
Teterboro*	GEP, VHP, CRL, BNA, VUZ
Washington Dulles/National*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ
White Plains*	GEP, VHP, CRL, FLM, IIU, BNA, VUZ
Willow Run*	LAN, LFD, VHP, FWA, GEP

*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522 Q505, Q504, Q502, Q501
or
Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP
or
Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area

CURLY CURLY-STAR

or

ESPAÑ FRIHO-STAR

or

LAVAN LAVAN-STAR

or

FTI FRIHO-STAR

or

MIERA MIERA-STAR

Austin Terminal Area

Aircraft west of a north-south line at LFK, BLEWE

or

Aircraft east of a north-south line at LFK, IDU

or

LLO

Boca Raton, FL

CEW DEFUN Q112 INPIN SHDAY (RNAV)-STAR

Aircraft through ZHU remain south of ZME and ZTL airspace

or

DEFUN Q112 INPIN SHDAY (RNAV)-STAR

Aircraft through ZHU remain south of ZME and ZTL airspace

or

SZW INPIN SHDAY (RNAV)-STAR

Chicago Midway

CVA MOTIF-STAR

or

PIA MOTIF-STAR

or

DBQ CVA MOTIF-STAR

or

LMN MOTIF-STAR

Chicago O'Hare Terminal Area

GEP DLL MSN JVL JANESVILLE-STAR

or

TVC PULLMAN-STAR

or

FOD DBQ JVL JANESVILLE-STAR

or

MCW JANESVILLE-STAR

or

GCK IRK BRADFORD-STAR

Dallas/Fort Worth Terminal Area

IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR

Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM

or

Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW

or

Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS

or

Aircraft through ZME airspace from J52 and south of J52, SQS

Denver Terminal Area

OATHE DANDD-STAR
 or
 HGO QUAIL-STAR
 or
 LOPEC-STAR
 or
 ALS LARKS-STAR
 or
 HBU POWDR-STAR
 or
 EKR TOMSN-STAR
 or
 CHE TOMSN-STAR
 or
 BFF LANDR-STAR
 or
 LBF SAYGE-STAR
 or
 HCT SAYGE-STAR
 or
 RSK LARKS-STAR
 or
 LAA QUAIL-STAR
 or
 GCK J154 RYLINE DANDD-STAR
 or
 OCS J154 ALPOE RAMMS-STAR
 or
 YANKI J114 SNY LANDR-STAR
 or
 Aircraft filed BIL or east, MBW RAMMS-STAR

Ft Lauderdale or
Ft Lauderdale Executive

CEW DEFUN Q104 PIE SWAGS (RNAV)-STAR
 Aircraft through ZHU airspace remain south ZME and ZTL
 airspace
 or
 SZW HEVNV Q104 PIE SWAGS (RNAV)-STAR

Houston Bush

CRP, CVE, LLO, LUKIY, SAT
 or
 Aircraft south and east of LLA, JEPEG
 or
 MISLE Q40 AEX
 or
 Aircraft north and east of SJI, SJI
 or
 Aircraft east of PXV, PXV Q31 DHART SWB
 or
 Aircraft north and west of PXV, PROWL Q33 DHART SWB

Houston Hobby

CRP, ELLVR, SAT, SWB
 or
 Aircraft south and east of GIRLY, KCEE
 or
 Aircraft north and east of SJI, SJI
 or
 BESOM Q38 ROKIT ROKIT-STAR
 or
 Aircraft east of PXV, PXV Q29 HARES SWB
 or
 Aircraft north and west of PXV, PROWL Q33 DHART SWB

Jacksonville

GADAY ZOOSS TAY
 Aircraft through ZHU airspace remain south of ZME and ZTL
 airspace
 or
 ZOOSS TAY

HIGH ALTITUDE REDESIGN (HAR) PHASE 1 RNAV ROUTING

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John Wayne–Orange County	HEC, PGS, BLD or Aircraft south of TBC from ZAB airspace, HIPPI
Kansas City Terminal Area	LMN BRAYMER–STAR or PWE ROBINSON–STAR or EMP JHAWK–STAR
Las Vegas	DILCO, LIDAT, IGM or Aircraft over PGA or north of PGA KSINO or Aircraft south of PGA PGS LYNSY
Los Angeles Terminal Area	Aircraft North of TBC, HEC, PGS or Aircraft South of TBC from ZAB airspace, HIPPI, MESSI
Miami Terminal Area	CEW DEFUN Q104 CYY DEEDS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVNV Q104 CYY DEEDS (RNAV)–STAR
Minneapolis Terminal Area	Aircraft from north, west, south, FAR GOPHER–STAR or RWF SKETR–STAR or ALO KASPR–STAR or BRD GOPHER–STAR or BAE EAU CLAIRE–STAR or FOD TWOOLF–STAR
Memphis Terminal Area	ARG, BWG, FSM, PVX, LIT, RZC, SQS, VUZ, BNA, GQO, ELD
Naples, FL	CEW DEFUN Q104 PLYER PIKKR (RNAV)–STAR Aircraft through ZHU AIRSPACE remain south of ZME and ZTL airspace or SZW HEVNV Q104 PLYER PIKKR (RNAV)–STAR
Nashville	CCT, GHM, GUITR, TINGS, VOLLS
New Orleans Terminal Area	BLUEZ, GPT, LCH, MCB, TBD, FATSO
Oakland	ILA or KATTS PAMMY or Aircraft over or south of a line ILC J16 DVC REANA KATTS PAMMY or Aircraft from north of ILC, JOPER PAMMY or KATTS PAMMY or Aircraft over or south of ILC, REANA KATTS PAMMY
Orlando Terminal Area	GADAY Q108 CLAWZ LEESE–STAR Aircraft through ZHU airspace remain south of ZME/ZTL airspace or OTK LEESE–STAR

Palm Beach, FL	CEW DEFUN Q112 INPIN GULLO (RNAV)-STAR Aircraft through ZHU airspace remain south of ZME and ZA airspace or SZW INPIN GULLO (RNAV)-STAR
Phoenix	CORKR DRK or Aircraft from ZDV airspace, GUP or Aircraft from ZAB airspace, ZUN, MOHAK, SSO or VYLLA TUS
Phoenix Satellites	FLG, SSO, MOHAK or VYLLA, TUS
Portland, OR Terminal Area	ARNIT BONVL-STAR or LARNO BONVL-STAR or MOXEE MOXEE-STAR
St. Louis Terminal Area	SGF TRAKE-STAR or BUM TRAKE-STAR or ANX TRAKE-STAR or LMN IRK RIVRS-STAR or RBS VANDALIA-STAR
Salt Lake City Terminal Area	JNC J12 HELPR SPANE-STAR or EKR MTU SPANE-STAR or BCE DTA-TCH or MLF DTA-TCH or BVL BONNEVILLE-STAR or BYI BEARR-STAR or PIH BEARR-STAR or DBS BRIGHAM CITY-STAR or JAC BRIGHAM CITY-STAR or BPI BRIGHAM CITY-STAR or OCS BRIGHAM CITY-STAR
San Diego Terminal Area	EED, LAX, GBN
Santa Ana	HEC, PGS, BLD, HIPPI
San Antonio Terminal Area	IDU, CSI, JCT, LLO, CRP, LRD or West of a north-south line at LFK, BLEWE or East of a north-south line at LFK, IDU

HIGH ALTITUDE REDESIGN (HAR) PHASE 1 RNAV ROUTING

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San Francisco

FMG GOLDEN GATE-STAR
or
MVA MODESTO-STAR
or
ENI GOLDEN GATE-STAR
or
OAL MODESTO-STAR
or
South of a line ILC to DVC,
REANA KATTS OAL MODESTO-STAR

San Jose

FMG HYP EL NIDO-STAR
or
OAL HYP EL NIDO-STAR
or
ENI GOLDEN GATE-STAR
or
South of a line ILC to DVC,
REANA KATTS KICHI CANDA EL NIDO-STAR

Seattle Terminal Area

Aircraft from northeast, southeast, south,
TEMPL GLASR-STAR
or
SUNED CHINS-STAR
or
BTG OLMPIA-STAR

Southwest Florida Airports
RSW and FMY

CEW DEFUN Q104 SWABE JOSFF-STAR
Aircraft through ZHU airspace remain south of ZME and ZTL
airspace
or
SZW HEVN Q104 SWABE JOSFF-STAR

Tampa Terminal Area

CEW DEFUN Q104 HEVN DARBS-STAR
Aircraft through ZHU airspace remain south of ZME and ZTL
airspace
or
SZW DARBS-STAR

Tucson

DRK PXR
or
MOHAK GBN

VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are portrayed on VFR Charts using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

BALTIMORE-WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT

VPAXI
VPONX
VPOOP

COLLOCATED VFR CHECKPOINT

LOCATION

N38°34.57'W076°20.38'
N39°06.65'W076°55.92'
N38°56.32'W076°36.90'

BOSTON HELICOPTER CHART

VPBAY
VPBLT
VPCGS
VPEVS
VPFEN
VPFRE
VPGVL
VPHAM
VPIK
VPQUA
VPQUB
VPSPF
VPTOB
VPWAN

N42°16.17'W070°49.48'
N42°19.67'W070°53.40'
N42°22.08'W071°03.13'
N42°23.52'W071°04.10'
N42°12.58'W071°08.88'
N42°25.03'W071°12.32'
N42°21.88'W070°52.18'
N42°30.13'W071°07.15'
N42°20.37'W071°15.93'
N42°12.10'W071°04.78'
N42°12.60'W070°59.83'
N42°24.20'W071°09.47'
N42°31.42'W070°59.82'
N42°36.88'W071°19.45'

BOSTON TERMINAL AREA CHART

VPCOH
VPCUT
VPFRA
VPHOL
VPHUL
VPLPT
VPNED
VPPEA
VPROC
VPSCI
VPTPT
VPTUC
VPWAK
VPWAN

COHASSET
CUTTYHUNK HARBOR
FRAMINGHAM SHOPPING CENTER
WOODS HOLE
HULL
NANTUCKET GREAT POINT
NEEDHAM TOWERS
PEABODY SHOPPING CENTER
ROCKINGHAM RACE TRACK
SCITUATE
NANTUCKET THIRD POINT
TUCKERNUCK
WAKEFIELD
WANG TOWERS

N42°13.58'W070°48.94'
N41°25.50'W070°55.03'
N42°18.16'W071°23.65'
N41°31.06'W070°40.60'
N42°18.20'W070°55.30'
N41°23.41'W070°02.78'
N42°18.51'W071°14.64'
N42°32.52'W070°56.69'
N42°46.29'W071°13.57'
N42°11.89'W070°43.69'
N41°18.51'W070°03.37'
N41°18.31'W070°15.43'
N42°30.72'W071°05.24'
N42°36.88'W071°19.45'

CHARLOTTE SECTIONAL CHART

VPATO
VPAVA
VPBFE
VPBRA
VPGCE
VPGHI
VPGIO
VPKJU
VPLMN
VPMAB
VPNPO
VPOKY
VPREP
VPRRS
VPUMO
VPWZO
VPZIE

ISLE OF PALMS

N34°37.37'W076°31.47'
N34°57.00'W077°16.50'
N32°16.38'W080°47.50'
N36°13.75'W076°08.08'
N36°03.90'W076°36.42'
N35°15.30'W075°31.25'
N35°32.50'W076°37.33'
N35°26.58'W076°10.22'
N34°55.43'W077°46.42'
N34°42.20'W077°03.50'
N32°47.78'W079°46.45'
N35°06.53'W075°59.17'
N32°33.98'W080°21.82'
N33°25.45'W079°07.60'
N35°35.63'W075°28.08'
N36°00.87'W075°40.07'
N32°01.62'W080°53.42'

DENVER TERMINAL AREA CHART/FLYWAY CHART

VPBEN	N39°44.28' / W104°26.00'
VPFTG	N39°44.35' / W104°32.75'
VPNIC	N39°58.90' / W104°59.27'

HOUSTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPBWY	_____	N29°46.25' / W095°09.24'
VPDTN	_____	N29°46.59' / W095°22.01'
VGGLA	_____	N30°08.32' / W095°06.62'
VPGLB	_____	N30°07.80' / W094°55.70'
VPKTY	_____	N29°47.05' / W095°44.92'
VPPLN	_____	N30°08.80' / W095°50.42'
VPRSN	_____	N29°30.00' / W095°41.00'
VPSND	_____	N29°23.13' / W095°28.86'
VPSNT	_____	N29°49.29' / W094°53.94'
VPTNE	_____	N29°47.48' / W095°03.34'
VPTNW	_____	N29°47.06' / W095°33.81'
VPTRK	_____	N29°24.06' / W095°10.44'

JACKSONVILLE SECTIONAL CHART

VPAFI	_____	N31°49.35' / W081°51.07'
VPAFY	_____	N30°07.00' / W081°21.33'
VPBEC	_____	N29°46.25' / W081°15.10'
VPCJA	_____	N29°30.00' / W081°06.00'
VPCKY	_____	N28°46.50' / W082°34.00'
VPCNY	_____	N28°30.00' / W080°45.00'
VPDAD	DADE CITY	N28°22.57' / W082°11.25'
VPDAR	_____	N31°22.38' / W081°24.13'
VPDFI	_____	N29°00.17' / W081°20.85'
VPDUT	_____	N27°37.70' / W082°09.10'
VPEAR	CLEARWATER BEACH	N27°58.67' / W082°49.83'
VPEGV	_____	N29°39.97' / W081°24.87'
VPFFU	_____	N28°57.08' / W081°00.33'
VPGPE	ST PETE BEACH	N27°43.50' / W082°44.67'
VPHAA	_____	N30°04.02' / W083°40.02'
VPHUC	_____	N28°19.87' / W082°43.77'
VPIWA	MIDWAY	N31°48.33' / W081°25.85'
VPJMY	_____	N29°26.92' / W081°18.27'
VPKER	LAKE PARKER	N28°04.00' / W081°56.00'
VPLEV	_____	N28°48.00' / W080°52.00'
VPLJA	_____	N29°00.00' / W080°51.00'
VMMAI	_____	N30°50.02' / W084°56.63'
VPTLH	_____	N30°32.70' / W083°52.22'
VPXZY	_____	N29°35.00' / W083°10.00'
VPYIW	_____	N30°42.28' / W081°27.25'
VPZIE	_____	N32°01.62' / W080°53.42'

KANSAS CITY SECTIONAL CHART

VPAGO	_____	N37°50.33' / W090°29.03'
VPBEK	_____	N37°15.07' / W092°30.67'
VPDEN	_____	N37°46.75' / W092°19.20'
VPENE	_____	N37°44.75' / W091°55.78'
VPESS	_____	N36°59.48' / W091°00.88'
VPFME	_____	N37°41.00' / W092°38.33'
VPGXY	_____	N37°15.50' / W091°40.17'
VPMBE	_____	N37°11.08' / W090°27.92'
VPMKE	_____	N37°24.47' / W092°40.00'
VPROV	_____	N38°01.72' / W091°12.81'
VPPUTT	_____	N37°52.05' / W092°01.20'

WAYPOINT IDENT
VPWOC
VPWRO
VPXIZ

COLLOCATED VFR CHECKPOINT

LOCATION
N37°18.03' / W092°18.63
N37°39.12' / W091°45.68
N37°26.60' / W092°05.42

KANSAS CITY TERMINAL AREA CHART

VPATN ATCHISON
VPBGS BLUE SPRINGS
VPBSP BONNER SPRINGS
VPCHB CHOUTEAU BRIDGE
VPDSO DE SOTO
VPESG EXCELSIOR SPRINGS
VPGTB GARRETSBURG
VPLAT LATHROP WATER TANK
VPLEN LENEXA
VPLVL LONGVIEW LAKE
VPMCL MC LOUTH
VPNHA NASHUA
VPSCX SPORTS COMPLEX
VPSKR SUGAR CREEK REFINERY
VPSPK SWOPE PARK
VPTSK TWIN STACKS
VPWF0 WORLDS OF FUN

N39°33.62' / W095°07.65
N39°01.82' / W094°16.32
N39°03.78' / W094°53.10
N39°08.77' / W094°32.03
N38°58.68' / W094°58.48
N39°20.68' / W094°13.77
N39°40.92' / W094°41.45
N39°32.87' / W094°20.00
N38°57.77' / W094°43.68
N38°54.63' / W094°28.28
N39°11.65' / W095°12.50
N39°17.83' / W094°34.80
N39°03.00' / W094°29.02
N39°07.00' / W094°27.02
N39°00.47' / W094°31.93
N39°09.05' / W094°38.22
N39°10.42' / W094°29.12

KLAMATH FALLS SECTIONAL CHART

VPORO

N43°57.38' / W123°02.22

LOS ANGELES HELICOPTER CHART

VPANA MAGNOLIA
VPART HWY 91 & 55
VPAUT
VPBOB
VPCAR
VPCNG
VPCOR
VPCRX
VPCSU
VPDOW
VPELA
VPETY
VPFCB
VPFPL
VPGOL
VPIMP
VPKAT
VPKEL
VPLAC
VPLLU
VPLQM
VPLRT
VPLVT
VPMDR
VPNEW
VPNUY
VPPCH
VPPKC
VPPOR
VPRRT
VPSEP
VPSFR
VPSTC
VPSTK
CONEJO GRADE US HWY 101
CSU CHANNEL ISLANDS
OXNARD FINANCIAL PLAZA
QUEEN MARY
SANTA ANITA RACE TRACK
VINCENT THOMAS BRIDGE
NEWHALL PASS
SATICOY BRIDGE

N33°44.43' / W117°50.03
N33°51.45' / W117°58.92
N33°50.63' / W117°49.57
N33°59.60' / W117°21.45
N33°49.90' / W118°17.23
N34°12.54' / W118°59.61
N33°52.90' / W117°32.95
N34°01.40' / W117°44.88
N34°09.76' / W119°02.53
N33°56.47' / W118°05.80
N34°00.98' / W118°10.35
N33°38.70' / W117°44.12
N34°02.03' / W118°01.63
N34°13.71' / W119°10.39
N34°09.33' / W118°17.37
N33°55.85' / W118°16.85
N33°48.23' / W117°54.22
N34°03.92' / W117°48.40
N34°03.75' / W118°14.93
N34°03.85' / W117°17.82
N33°45.17' / W118°11.37
N34°08.45' / W118°02.65
N33°44.97' / W118°16.32
N33°59.27' / W118°23.97
N34°20.18' / W118°30.72
N34°09.63' / W118°28.18
N33°28.07' / W117°40.32
N34°03.32' / W118°12.83
N34°00.10' / W117°50.12
N33°59.37' / W118°16.83
N34°05.80' / W118°28.63
N34°17.45' / W118°28.07
N34°16.62' / W119°08.34
N34°13.97' / W118°24.60

VFR WAYPOINTS**LOS ANGELES SECTIONAL CHART**

WAYPOINT IDENT
 VPCNG
 VPCSU
 VPFPPL
 VPSTC

COLLOCATED VFR CHECKPOINT
 CONEJO GRADE US HWY 101
 CSU CHANNEL ISLANDS
 OXNARD FINANCIAL PLAZA
 SATICOY BRIDGE

LOCATION
 N34°12.54'/W118°59.61'
 N34°09.76'/W119°02.53'
 N34°13.71'/W119°10.39'
 N34°16.62'/W119°08.34'

LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

VPCNG
 VPCSU
 VPGTY
 VPLBP
 VPLCC
 VPLCP
 VPLDL
 VPLDP
 VPLDS
 VPLFX
 VPLGP
 VPLHF
 VPLHP
 VPLKH
 VPLLC
 VPLLM
 VPLMM
 VPLMS
 VPLPD
 VPLPP
 VPLQM
 VPLRB
 VPLRT
 VPLSA
 VPLSB
 VPLSC
 VPLSF
 VPLSP
 VPLSR
 VPLSS
 VPLTW
 VPLVT
 VPLWT
 VPNEW
 VPSTC

CONEJO GRADE US HWY 101
 CSU CHANNEL ISLANDS
 GETTY CENTER
 BANNING PASS
 CHAFFEY COLLEGE
 CAJON PASS
 DISNEYLAND
 DANA POINT
 DODGER STADIUM
 91/605 INTERCHANGE
 GRIFFITH PARK OBSERVATORY
 110/405 FWYS
 HUNTINGTON PIER
 KING HARBOR
 L.A. COLISEUM
 LAKE MATHEWS
 MAGIC MOUNTAIN
 MILE SQUARE PARK
 PRADO DAM
 PACIFIC PALISADES
 QUEEN MARY
 ROSE BOWL
 SANTA ANITA RACE TRACK
 SANTA ANA CANYON
 SANTA FE FLOOD BASIN
 STATE COLLEGE
 SAN FERNANDO RESERVOIR
 SIGNAL PEAK
 HAWTHORNE & 405 FREEWAY
 SANTA SUSANA PASS
 TUJUNGA WASH & FOOTHILL
 VINCENT THOMAS BRIDGE
 WATER TANK
 NEWHALL PASS
 SATICOY BRIDGE

N34°12.54'/W118°59.61'
 N34°09.76'/W119°02.53'
 N34°04.84'/W118°28.66'
 N33°56.05'/W116°59.63'
 N34°08.87'/W117°34.33'
 N34°18.07'/W117°27.68'
 N33°48.72'/W117°55.13'
 N33°27.62'/W117°42.87'
 N34°04.42'/W118°14.42'
 N33°52.38'/W118°06.08'
 N34°07.10'/W118°18.02'
 N33°51.42'/W118°17.10'
 N33°39.32'/W118°00.25'
 N33°50.75'/W118°23.88'
 N34°00.83'/W118°17.27'
 N33°50.58'/W117°26.85'
 N34°26.20'/W118°36.28'
 N33°43.40'/W117°56.77'
 N33°53.40'/W117°38.48'
 N34°02.13'/W118°32.15'
 N33°45.17'/W118°11.37'
 N34°09.67'/W118°10.05'
 N34°08.45'/W118°02.65'
 N33°52.03'/W117°42.68'
 N34°07.72'/W117°57.30'
 N33°52.97'/W117°53.13'
 N34°17.87'/W118°29.00'
 N33°36.33'/W117°48.63'
 N33°53.07'/W118°21.13'
 N34°16.00'/W118°38.43'
 N34°16.40'/W118°20.30'
 N33°44.97'/W118°16.32'
 N34°10.82'/W118°46.27'
 N34°20.18'/W118°30.72'
 N34°16.62'/W119°08.34'

MIAMI SECTIONAL CHART

VPACH
 VPBOV
 VPCLE
 VPCTE
 VPDAD
 VPDUT
 VPDZE
 VPEAR
 VPEDY
 VPFAH
 VPGPE
 VPHRO
 VPHUC
 VPIBR
 VPKER
 VPKOE
 VPLYY
 VPMBO
 VPOBA
 VPRBI
 VPRNL
 VPWMO

HOLLYWOOD BEACH

 DADE CITY

 CLEARWATER BEACH
 ANDYTOWN TOLLGATE

 ST PETE BEACH

 LAKE PARKER

 GULFSTREAM PARK
 PUMPING STATION

 RANGER STATION

N26°00.92'/W080°06.93'
 N27°57.00'/W080°46.75'
 N26°27.07'/W082°00.88'
 N26°09.28'/W081°20.70'
 N28°22.57'/W082°11.25'
 N27°37.70'/W082°09.10'
 N27°19.00'/W080°44.17'
 N27°58.67'/W082°49.83'
 N26°08.78'/W080°28.00'
 N26°25.40'/W081°29.67'
 N27°43.50'/W082°44.67'
 N27°05.97'/W082°12.20'
 N28°19.87'/W082°43.77'
 N27°12.47'/W081°40.22'
 N28°04.00'/W081°56.00'
 N24°40.08'/W081°20.55'
 N24°49.07'/W080°49.17'
 N25°58.57'/W080°08.17'
 N26°28.30'/W080°26.75'
 N25°50.67'/W080°55.18'
 N25°22.92'/W080°36.58'
 N27°03.00'/W080°35.00'

MIAMI TERMINAL AREA CHART/FLYWAY CHART**WAYPOINT IDENT**

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPACH	HOLLYWOOD BEACH	N26°00.92' / W080°06.93
VPEDY	ANDYTOWN TOLLGATE	N26°08.78' / W080°28.00
VPMBO	GULFSTREAM PARK	N25°58.57' / W080°08.17'
VPOBA	PUMPING STATION	N26°28.30' / W080°26.75
VPRBI		N25°50.67' / W080°55.18
VPRNL	RANGER STATION	N25°22.92' / W080°36.58

NEW ORLEANS SECTIONAL CHART

VPGPT		N30°25.95' / W089°05.62
VPLIP	PHILLIPS INLET	N30°16.23' / W085°59.25
VPMAI		N30°50.02' / W084°56.63
VPMOB		N30°23.00' / W088°31.72
VPRAM		N30°18.95' / W089°35.88
VPRER		N30°13.87' / W085°20.67
VPRIV		N30°54.85' / W087°57.82
VPSAW		N30°49.65' / W089°07.42
VPTHR		N30°19.93' / W087°08.50

NEW YORK HELICOPTER CHART

VPJAY		N40°59.00' / W073°07.00
VPLYD		N40°57.37' / W073°29.59
VPROK		N40°52.70' / W073°44.24

PHOENIX TERMINAL AREA CHART/FLYWAY CHART

VPALL	ALLENVILLE	N33°20.97' / W112°35.20
VPAQU	AQUEDUCT PUMPING STATION	N33°40.05' / W112°41.38
VPARM	ARROWHEAD MALL	N33°38.52' / W112°13.48
VPAWG	AHWATUKEE GOLF COURSE	N33°19.98' / W111°59.08
VPAZM	ARIZONA MILLS	N33°23.43' / W111°57.88
VPBAR	BARTLETT DAM	N33°49.10' / W111°37.92
VPCCC	COUNTRY CLUB & CANAL	N33°30.73' / W111°50.37
VPCNL	CANAL	N33°33.23' / W111°46.89
VPFRB	FIREBIRD LAKE	N33°16.35' / W111°58.10
VPFTN	FOUNTAIN HILLS	N33°36.12' / W111°42.72
VGGLX	GILA CROSSING	N33°16.55' / W112°10.08
VGPP	GLENDALE POWER PLANT	N33°33.27' / W112°13.00
VPMAR	MARICOPA	N33°03.42' / W112°02.88
VPMHS	MESQUITE HIGH SCHOOL	N33°20.53' / W111°49.58
VPNRV	NEW RIVER	N33°55.08' / W112°08.45
VPNTT	NORTH TEST TRACK	N33°03.50' / W111°55.83
VPIPIR	PIR	N33°22.52' / W112°18.90
VPQTR	QUINTERO GOLF COURSE	N33°49.53' / W112°23.58
VPRVC	RIO VERDE COMMUNITY	N33°44.37' / W111°39.62
VPSMC	SOUTH MOUNTAIN COLLEGE	N33°23.02' / W112°02.12
VPSQP	SQUAW PEAK	N33°32.83' / W112°01.27
VPSSS	SUPERSTITION SPRINGS MALL	N33°23.50' / W111°41.37
VPSTN	SANTAN MOUNTAINS	N33°09.23' / W111°40.92
VPSTT	SOUTH TEST TRACK	N32°56.25' / W111°59.67
VPZZZ		N33°20.18' / W111°26.53

ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

VPAGN	TV ANTENNA	N38°32.08' / W090°22.42
VPBPE		N38°23.80' / W090°20.38
VPCJY	HOLIDAY SHORES	N38°55.00' / W089°56.00
VPCOJ	WINFIELD DAM	N39°00.28' / W090°41.23
VPDFA	JEFFERSON BARRACKS BRIDGE	N38°29.18' / W090°16.47
VPEAZ	BUSCH STADIUM	N38°37.43' / W090°11.55
VPEDZ	WATER TANKS	N38°45.30' / W090°34.87
VPEGR	GAS TANKS	N38°35.80' / W090°19.32
VPEOX	ST PETERS	N38°47.17' / W090°39.25

WAYPOINT IDENT

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPFAI	HOWELL ISLAND	N38°40.00' / W090°43.00'
VPFFY		N38°55.37' / W090°17.30'
VPGPF		N38°35.60' / W090°26.92'
VPGVI		N38°32.30' / W090°27.80'
VPHRQ	CHAIN OF ROCKS BRIDGE	N38°45.88' / W090°10.42'
VPIBO	WATERLOO	N38°20.00' / W090°09.00'
VPJMU	HORSESHOE LAKE	N38°41.00' / W090°05.00'
VPKNY	PACIFIC	N38°29.00' / W090°44.00'
VPLES	ST CHARLES	N38°47.00' / W090°30.00'
VPLIW	SIX FLAGS	N38°30.67' / W090°40.47'
VPLXU	GATEWAY ARCH	N38°37.50' / W090°11.00'
VPNSY	WOOD RIVER REFINERIES	N38°50.00' / W090°05.00'
VPNZY	WENTZVILLE	N38°48.83' / W090°50.98'
VRPAZ	JERSEYVILLE	N39°07.00' / W090°20.00'
VPRMO	FOREST PARK	N38°38.00' / W090°17.00'
VPWK0	COLUMBIA	N38°27.00' / W090°12.00'
VPXXI	MILLSTADT	N38°27.50' / W090°05.68'
VPYID	MOSENTHEIN ISLAND	N38°43.00' / W090°12.25'

SALT LAKE CITY HELICOPTER CHART

VPAIR	SALTAIR	N40°44.85' / W112°11.22'
VPBEE	SOUTH INTERCHANGE	N40°38.18' / W111°54.23'
VPBRN	BARN	N40°54.28' / W112°10.15'
VPCAP	STATE CAPITOL	N40°46.67' / W111°53.25'
VPCHS		N40°42.28' / W112°05.92'
VPCOP	BINGHAM COPPER MINE	N40°31.38' / W112°09.00'
VPCWY	CAUSEWAY	N41°05.37' / W112°07.17'
VPCYN	PARLEYS CANYON	N40°42.67' / W111°48.10'
VPFPC	FREE PORT CENTER	N41°05.92' / W112°02.27'
VPFPK	FRANCIS PEAK	N41°01.98' / W111°50.30'
VPGFS	GARFIELD STACK	N40°43.28' / W112°11.88'
VPHVE	SPAGHETTI BOWL	N40°43.50' / W111°54.22'
VPJRT	JORDAN RIVER TEMPLE	N40°35.02' / W111°55.58'
VPKSL	KSL ANTENNA	N40°46.80' / W112°05.80'
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08' / W111°53.57'
VPMDH	MCKAY DEE HOSPITAL	N41°11.50' / W111°57.08'
VPMMT	MICROWAVE TOWERS	N40°48.50' / W111°53.37'
VPMSH		N41°01.67' / W112°02.47'
VPNSL		N40°50.15' / W111°54.90'
VPNTP		N41°03.57' / W112°14.23'
VPOGE	GRAIN ELEVATOR	N41°13.13' / W112°00.45'
VPOPS	POWER STATION	N41°20.38' / W112°02.78'
VPPEN	STATE PRISON	N40°29.88' / W111°53.62'
VPPPT	PROMONTORY POINT	N41°12.28' / W112°25.73'
VPPTM	POINT OF THE MOUNTAIN	N40°27.42' / W111°54.83'
VPPVO	PROVO CANYON	N40°18.77' / W111°39.45'
VPRWY		N40°48.48' / W112°00.33'
VPSLC	I-15/I-80 INTERCHANGE	N40°45.83' / W111°54.85'
VPTIP	SOUTH TIP	N40°50.93' / W112°10.92'
WPWBR	WEBER CANYON	N41°08.17' / W111°54.83'
WPWBT		N40°38.00' / W112°03.33'

SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART

VPAIR	SALTAIR	N40°44.85' / W112°11.22'
VPBEE	SOUTH INTERCHANGE	N40°38.18' / W111°54.23'
VPBRN	BARN	N40°54.28' / W112°10.15'
VPCAP	STATE CAPITOL	N40°46.67' / W111°53.25'
VPCHS		N40°42.28' / W112°05.92'
VPCOP	BINGHAM COPPER MINE	N40°31.38' / W112°09.00'
VPCVI	CENTERVILLE INTERCHANGE	N40°55.30' / W111°53.43'
VPCWY	CAUSEWAY	N41°05.37' / W112°07.17'
VPCYN	PARLEYS CANYON	N40°42.67' / W111°48.10'
VPFPC	FREE PORT CENTER	N41°05.92' / W112°02.27'
VPFPK	FRANCIS PEAK	N41°01.98' / W111°50.30'
VPGFS	GARFIELD STACK	N40°43.28' / W112°11.88'

WAYPOINT IDENT
 VPHE
 VPJRT
 VPKSL
 VPLGN
 VPMHD
 VPMMT
 VPMSH
 VPNL
 VPNTP
 VPOGE
 VPOPS
 VPPEN
 VPPPT
 VPPTM
 VPPVO
 VPRWY
 VPSLC
 VPTIP
 VPUOU
 VPWB
 VPWB
 VPZOO

COLLOCATED VFR CHECKPOINT
 SPAGHETTI BOWL
 JORDAN RIVER TEMPLE
 KSL ANTENNA
 LAGOON AMUSEMENT PARK
 MCKAY DEE HOSPITAL
 MICROWAVE TOWERS

 GRAIN ELEVATOR
 POWER STATION
 STATE PRISON
 PROMONTORY POINT
 POINT OF THE MOUNTAIN
 PROVO CANYON

 I-15/I-80 INTERCHANGE
 SOUTH TIP
 U OF U EVENTS CENTER
 WEBER CANYON

 HOGLE ZOO

LOCATION
 N40°43.50' / W111°54.22'
 N40°35.02' / W111°55.58'
 N40°46.80' / W112°05.80'
 N40°59.08' / W111°53.57'
 N41°11.50' / W111°57.08'
 N40°48.50' / W111°53.37'
 N41°01.67' / W112°02.47'
 N40°50.15' / W111°54.90'
 N41°03.57' / W112°14.23'
 N41°13.13' / W112°00.45'
 N41°20.38' / W112°02.78'
 N40°29.88' / W111°53.62'
 N41°12.28' / W112°25.73'
 N40°27.42' / W111°54.83'
 N40°18.77' / W111°39.45'
 N40°48.48' / W112°00.33'
 N40°45.83' / W111°54.85'
 N40°50.93' / W112°10.92'
 N40°45.73' / W111°50.28'
 N41°08.17' / W111°54.83'
 N40°38.00' / W112°03.33'
 N40°45.00' / W111°48.95'

SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

VPLDP	DANA POINT	N33°27.62' / W117°42.87'
VPLSP	SIGNAL PEAK	N33°36.33' / W117°48.63'
VPOCN	_____	N33°14.15' / W117°26.63'
VPSBC	BARONA CASINO	N32°56.25' / W116°52.60'
VPSBL	_____	N33°05.18' / W117°18.55'
VPSBM	BLACK MOUNTAIN	N32°58.87' / W117°07.00'
VPSCF	_____	N32°48.55' / W117°09.17'
VPSCM	COWLES MOUNTAIN	N32°48.72' / W117°01.97'
VPSCP	CRYSTAL PIER	N32°47.77' / W117°15.42'
VPSCR	_____	N32°39.37' / W117°07.30'
VPSFB	IRON MOUNTAIN	N32°58.25' / W116°57.33'
VPSLJ	LAKE JENNINGS	N32°51.53' / W116°53.28'
VPSMB	_____	N32°45.57' / W117°12.22'
VPSMP	_____	N33°22.70' / W117°36.75'
VPSMS	MOUNT SOLEDAD	N32°50.40' / W117°15.10'
VPSMV	_____	N32°45.75' / W117°09.80'
VPSMW	MOUNT WOODSON	N33°00.52' / W116°58.23'
VPSOP	OTAY MESA PRISON	N32°35.82' / W116°55.28'
VPSOT	LOWER OTAY LAKE	N32°37.73' / W116°55.38'
VPSPL	SOUTH POINT LOMA	N32°39.90' / W117°14.55'
VPSPP	POWER PLANT	N33°08.25' / W117°20.23'
VPSQS	QUALCOMM STADIUM	N32°46.98' / W117°07.23'
VPSRT	DEL MAR RACE TRACK	N32°58.58' / W117°15.95'
VPSSM	SAN MIGUEL MOUNTAIN	N32°41.78' / W116°56.18'
VPSSV	SAN VICENTE ISLAND	N32°55.53' / W116°55.00'
VPSTP	TORREY PINES GOLF COURSE	N32°54.17' / W117°14.68'
VPSVA	_____	N33°11.48' / W117°16.38'

SAN FRANCISCO SECTIONAL CHART

VPKBG	KINGSBURY GRADE	N38°58.75' / W119°53.20'
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SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

VPALT	ALTAMONT PASS	N37°44.35' / W121°35.42'
VPANT	ANTIOCH BRIDGE	N38°01.45' / W121°45.02'
VPBBR	BENICIA BRIDGE	N38°02.50' / W122°07.45'
VPCAL	CALAVERAS RESERVOIR	N37°28.16' / W121°48.93'
VPCBT	LAKE CHABOT	N37°43.68' / W122°06.94'
VPCOY	COYOTE HILLS	N37°32.50' / W122°05.06'
VPCQZ	CARQUINEZ BRIDGE	N38°03.66' / W122°13.52'
VPCRL	_____	N37°11.00' / W121°41.06'
VPCRY	CRYSTAL SPRINGS CAUSEWAY	N37°30.56' / W122°21.10'

VFR WAYPOINTS**WAYPOINT IDENT**

VPCSH
VPDAM
VPDLR
VPDUB
VPEMB
VPGGF
VPGIL
VPHHH
VPKG0
VPLEX
VPMID
VPMOR
VPNUM
VPPAC
VPPRU
VPSAR
VPSLA
VPSTB
VPSUN
VPUTC
VPWAL
VPWAM
VPWFR

COLLOCATED VFR CHECKPOINT

CAL STATE UNIVERSITY
DEL VALLE DAM

DUBLIN
EMBASSY SUITES
GOLDEN GATE FIELDS
GILROY
HAMILTON
KGO
LEXINGTON RESERVOIR
MID-SPAN SAN MATEO BRIDGE
MORMON TEMPLE
NUMMI PLANT

PRUNEYARD
SARATOGA
SLAC/LINEAR ACCELERATOR
STINSON BEACH
SUNOL GOLF COURSE
U.T.C.
WALNUT CREEK

CEMENT PLANT

LOCATION

N37°39.52' / W122°03.52'
N37°36.91' / W121°44.78'
N37°07.00' / W121°47.06'
N37°42.06' / W121°55.36'
N37°26.05' / W121°53.83'
N37°53.07' / W122°18.71'
N37°01.37' / W121°33.99'
N38°03.58' / W122°30.66'
N37°31.58' / W122°06.10'
N37°11.66' / W121°59.18'
N37°36.28' / W122°11.81'
N37°48.46' / W122°11.95'
N37°29.56' / W121°56.58'
N37°38.00' / W122°32.07'
N37°17.33' / W121°56.01'
N37°15.26' / W122°02.33'
N37°24.75' / W122°14.35'
N37°54.45' / W122°40.41'
N37°34.85' / W121°53.23'
N37°13.93' / W121°41.35'
N37°53.78' / W122°04.30'
N37°30.28' / W122°10.00'
N37°30.88' / W122°12.26'

TAMPA/ORLANDO TERMINAL AREA CHART/FLYWAY CHART

VPBOV
VPCNY
VPDAD
VPDFI
VPDUT
VPEAR
VPFFU
VPGPE
VPHUC
VPKER
VPLEV
VPLJA

DADE CITY

CLEARWATER BEACH

ST PETE BEACH

LAKE PARKER

N27°57.00' / W080°46.75'
N28°30.00' / W080°45.00'
N28°22.57' / W082°11.25'
N29°00.17' / W081°20.85'
N27°37.70' / W082°09.10'
N27°58.67' / W082°49.83'
N28°57.08' / W081°00.33'
N27°43.50' / W082°44.67'
N28°19.87' / W082°43.77'
N28°04.00' / W081°56.00'
N28°48.00' / W080°52.00'
N29°00.00' / W080°51.00'

WASHINGTON SECTIONAL CHART

VPACE
VPAXI
VPBRA
VPGCE
VPWZO

N38°07.82' / W076°48.75'
N38°34.57' / W076°20.38'
N36°13.75' / W076°08.08'
N36°03.90' / W076°36.42'
N36°00.87' / W075°40.07'

**VOR RECEIVER CHECKPOINTS
AND
VOT TEST FACILITIES (VOT)**

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed Type of Checkpoint & Type of VOT Facility G stands for ground. A/ stands for airborne followed by figures (2300) or (1000-3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

CONNECTICUT

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Carmel (Danbury Muni)	116.6/CMK	A/1500	050	6.7	Over apch end of Rwy 08.
Madison (Chester)	110.4/MAD	A/1500	076	9.4	Over small hangar.
Madison (Meriden Markham Muni)	110.4/MAD	A/1500	345	13.4	Over small hangar.
Norwich (Windham)	110.0/ORW	A/1500	339	13.9	Over intersection of rwy and twy.
Putnam (Danielson)	117.4/PUT	A/1300	211	8.5	Over int of ramp taxiway and rwy.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Bradley Int'l	111.4	G	
Bridgeport (Igor I. Sikorsky Mem)	109.25	G	
Groton (Groton-New London).....	110.25	G	
Hartford (Hartford-Brainard)	108.2	G	

DELAWARE

VOR RECEIVER CHECK POINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Smyrna (Delaware Airpark)	111.4/ENO	A/1000	267	3.6	Over thld Rwy 27.
Wilmington (New Castle)	114.0/DQO	G	170	0.5	On runup pad Rwy 01.
		G	284	0.6	On Twy 'K' at Rwy 09.
		G	067	0.5	On Twy 'K' at Rwy 27. OTS indef.
Wilmington (Summit Airpark)	114.0/DQO	A/1200	219	10.8	Over rotating bcn. OTS indef.

MAINE

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check	Azimuth from	Dist. from	
		Pt. Gnd.	Fac.	Fac.	
			Mag	N.M.	Checkpoint Description
Bangor (Bangor Intl)	114.8/BGR	G	153	3.8	On runup area Rwy 33.
Kennebunk (Sanford Rgnl)	117.1/ENE	A/1300	267	4.5	Over Twy C and dspclcd thld Rwy 14.
Presque Isle (Caribou Muni)	116.4/PQI	A/1700	051	6.5	Over intersection of rwys.
Presque Isle (Northern Maine Rgnl Arpt at Presque Is)	116.4/PQI	A/2000	180	5.7	Over intersection of rwys.
Princeton (Princeton Muni)	114.3/PNN	A/1300	164	9.6	Over intersection of rwy and strip. OTS indef.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Portland Intl Jetport	111.0	G	
Bangor Intl	111.0	G	

MARYLAND

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check	Azimuth from	Dist. from	
		Pt. Gnd.	Fac.	Fac.	
			Mag	N.M.	Checkpoint Description
Frederick (Frederick Muni)	109.0/FDK	G	035	0.6	On runup pad apch end Rwy 23.
Frederick (Montgomery County Airpark)	109.0/FDK	G	359	0.6	Intersection Twys H and D.
Hagerstown (Hagerstown Rgnl-Richard A Henson Fld)	109.8/HGR	A/2000	155	17.2	Over apch end Rwy 14.
Salisbury (Ocean City Muni)	111.2/SBY	A/1700	089	5.3	Over new ATCT.
Salisbury (Salisbury-Ocean City Wicomico Rgnl)	111.2/SBY	A/1300	109	18.6	Intersection of twy and Rwy 32.
Salisbury (Salisbury-Ocean City Wicomico Rgnl)	111.2/SBY	G	221	0.7	Runup pad Rwy 05.

VOR RECEIVER CHECK MASSACHUSETTS

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type	Check	Azimuth	Dist.	
		Pt.	Gnd.	from	from	
		AB/ALT		Fac.	Fac.	
Barnes (Barnes Muni).....	113.0/BAF	G		207	1	Checkpoint Description From the facility.
Gardner (Fitchburg Muni)	110.6/GDM	A/1500		102	13.0	Over intersection of rwys.
Gardner (Metropolitan)	110.6/GDM	A/2000		097	1.9	Over intersection of twy and rwy.
Gardner (Orange Muni)	110.6/GDM	A/1500		292	10	Over parachute jump circle.
Gardner (Worcester Rgnl)	110.6/GDM	A/2000		167	18.8	Over intersection of Rwys 11-29 and 15-33.
Lawrence (Plum Island)	112.5/LWM	A/1500		089	11.8	Over apch end Rwy 10.
Marthas Vineyard (Marthas Vineyard)	114.5/MVY	G		216	0.7	On runup block for Rwy 06
Nantucket (Nantucket Memorial)	116.2/ACK	G		242	1.9	On runup area at apch end Rwy 24.
Putnam (Southbridge Muni)	117.4/PUT	A/1700		329	12	Over intersection of twy and rwy.

VOT TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT	Facility	Remarks
Laurence G. Hanscom	110.0	G		
Gen. Ed. Lawrence Logan Intl.	111.0	G		
Worcester Rgnl	108.2	G		

NEW HAMPSHIRE

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type	Check	Azimuth	Dist.	
		Pt.	Gnd.	from	from	
		AB/ALT		Fac.	Fac.	
Berlin (Berlin Rgnl)	110.4/BML	A/2600		190	6.0	Checkpoint Description Over ski jump on W side of road.
Gardner (Jaffrey Arpt-Silver Ranch)	110.4/BML	G		191	3.4	Hold short line Rwy 18-36
Gardner (Jaffrey Arpt-Silver Ranch)	110.6/GDM	A/2000		023	15.8	Over intersection of rwy and twy.
Lebanon (Lebanon Muni)	113.7/LEB	A/1600		246	5.0	Over intersection of Rwy 07-25 and 18-36.
Pease (Portsmouth Intl at Pease).....	113.7/LEB	G		248	5.1	On Bravo-Two twy.
Pease (Portsmouth Intl at Pease).....	116.5/PSM	G		015	0.4	North runup pad.
Pease (Skyhaven)	116.5/PSM	G		157	1.5	On south runup pad.
Pease (Skyhaven)	116.5/PSM	A/1500		356	12.6	Over windsock.

NEW JERSEY

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type	Check	Azimuth	Dist.	
		Pt.	Gnd.	from	from	
		AB/ALT		Fac.	Fac.	
Cedar Lake (Millville Muni)	115.2/VCN	A/1500		215	11.4	Checkpoint Description Over intersection Rwy 10-28 and 14-32.
Coyle (Lakewood)	113.4/CYN	A/1000		048	18.9	Over apch end Rwy 06.
Coyle (Robert J. Miller Air Park)	113.4/CYN	A/1500		054	9.0	Over apch end Rwy 06.
Robbinsville (Trenton-Robbinsville)	113.8/RBV	A/1200		289	5.2	Over apch end Rwy 11.
Sea Isle (Cape May County)	114.8/SIE	A/1200		236	6.8	Over apch end Rwy 19.
Yardley (Trenton Mercer)	108.2/ARD	A/1500		080	4.5	Over ATCT.

VOR RECEIVER CHECK**NEW YORK****VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Binghamton (Greater Binghamton/Edwin A Link Fld)	112.2/CFB	G	075	7.6	On north ramp.
Binghamton (Tri-Cities)	112.2/CFB	A/2000	170	5.0	Over rwy intersection.
Carmel (Westchester County)	116.6/CMK	A/1500	215	14.0	Over center of arpt.
Dunkirk (Chautauqua Co/Dunkirk)	116.2/DKK	G	043	0.5	On twy adjacent to the apch end Rwy 24.
Glens Falls (Floyd Bennett Memorial)	110.2/GFL	G	034	0.5	On runup area Rwy 19.
Groton (Elizabeth Field)	110.85/GON	A/1200	183	4.8	Over intersection of rwys.
Huguenot	116.1/HUO	A/3000	222	6.2	Over monument on hill.
Huguenot (Randall)	116.1/HUO	A/1500	093	8.8	Over apch end Rwy 08.
Ithaca (Tompkins Rgnl)	111.8/ITH	G	157	0.8	On twy apch end Rwy 32.
Jamestown (Chautauqua County/Jamestown)	114.7/JHW	A/2500	260	6.2	Over hangar NE corner of arpt.
Kingston (Sky Acres)	117.6/IGN	A/2500	070	5.0	Over intersection of twy and Rwy 17-35.
Kingston (Sky Park)	117.6/IGN	A/1500	010	18.8	Over apch end Rwy 01.
Poughkeepsie (Dutchess County)	114.3/PWL	A/1500	248	15.2	Over intersection Rwys 15-33 and 06-24.
Rockdale (Oneonta Muni)	112.6/RKA	A/3000	078	8.5	Over hangar.
Rockdale (Sidney Muni)	112.6/RKA	A/2200	229	12.5	Over hangar.
Rochester (Greater Rochester Intl)	110.0/ROC	G	98	0.6	On Twy 'K' between Twys 'F' and 'J'. (Near de-ice pad).
Saranac Lake	109.2/SLK	A/3000	141	4.2	Over microwave tower on Mt Pisgah.
Watertown (Watertown Intl)	109.8/ART	G	046	3.0	On ramp in front of administration building.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Albany County	108.2	G	Unusable runup and hold areas Twy M. Unusable runup pad, holding area and apch end of Rwy 19.
Buffalo Niagara Intl	109.0	G	
New York (Long Island MacArthur)	109.4	G	

PENNSYLVANIA**VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Bradford (Bradford Rgnl)	116.6/BFD	G	321	1.1	On SE twy midway between ramp and Rwy 32.
Clarion (Clarion County)	112.9/CIP	A/3000	286	10.9	Over center of interstate bridge/river.
East Texas (Allentown Queen City Muni)	110.2/ETX	A/1200	103	9.2	Over intersection of Rwy 07-25 and 14-32.

VOR RECEIVER CHECK

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Erie (Erie Intl/Tom Ridge Fld)	109.4/ERI	G	060		6.1 NM on twy at apch end Rwy 06. Ground receiver checkpoint OTS.
Hazelton (Hazelton Muni).....	109.4/HZL	G	093		On short twy midfield. VOR ground checkpoint OTS indef.
Lancaster (Lancaster)	117.3/LRP	G	306	0.5	On Twy M.
Milton (Bloomsburg Muni)	109.2/MIP	A/1500	108	10.3	Over threshold Rwy 08.
North Philadelphia (Northeast Philadelphia)	112.0/PNE	G	215		Twy F.
Philipsburg (Mid-State)	115.5/PSB	G	256	4.5	On twy near intersection of Rwys 06-24 and 16-34.
Philipsburg (University Park)	115.5/PSB	A/2500	132	7.6	Over intersection of Rwys 06-24 and 16-34.
Pottstown (Pottstown Muni)	116.5/PTW	A/1500	303	5.6	Over E hangar. VOR airborne checkpoint OTS indef.
Ravine (Muir AAF)	114.6/RAV	A/2500	179	7.7	Over water twr ½ NM NE of rwy.
Ravine (Schuylkill County/Joe Zerbey)	114.6/RAV	A/2000	060	13.9	Over intersection of Rwys 11-29 and 04-22. VOR airborne checkpoint OTS indef.
Solberg (Doylestown)	112.9/SBJ	A/1500	240	22.6	Over apch end Rwy 23.
Stonyfork (Wellsboro Johnston)	108.6/SFK	A/3600	111	6.5	Over 2558' tower.
Wilkes-Barre (Pocono Mountains Muni)	111.6/LVZ	A/3000	131	16.2	Over intersection of Rwys 05-23 and 13-31.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Harrisburg Intl	110.0	G	
Philadelphia Intl.	109.8	G	Unusable west of Twy Y.

RHODE ISLAND**VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Providence (Newport State)	115.6/PVD	A/1400	164	13.4	Over intersection of rwys.
Providence (North Central State)	115.6/PVD	A/1500	360	12.2	Over intersection of rwys.
Groton (Block Island State)	110.85/GON	A/1800	129	23.5	Over terminal building.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Providence (Theodore Francis Green State)	108.2	G	

**VOR RECEIVER CHECK
VERMONT
VOR TEST FACILITIES (VOT)**

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Burlington Intl.	109.0	G	

**VIRGINIA
VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac.	Dist. from Fac.	Checkpoint Description
Cape Charles (Campbell Field)	112.2/CCV	AB/ALT	Mag 050	8.9	Over rwy intersection.
Cape Charles (Tangier Island)	112.2/CCV	A/1500	010	28.4	Over apch end Rwy 02.
Danville (Danville Rgnl)	113.1/DAN	G	340		At intersection of Twy A and hangar row near Twy E.
Flat Rock (Farmville Rgnl)	113.3/FAK	A/1600	257	31	Over intersection of twy and rwy.
Lynchburg (Lynchburg Rgnl-Preston Glenn Field)	109.2/LYH	G	026	5.0	West runup area adjacent to Rwy 22.
Norfolk (Norfolk Intl)	116.9/ORF	G	031		At center of twy E 250' NW of centerline of Rwy 23.
Richmond	114.1/RIC	A/2100	306	8.5	Over 1054' twr.
Richmond (Richmond Intl)	114.1/RIC	G	005	.9	On run up area Rwy 16 Twy.
		G	344	.9	On twy in front of Aeronautical Services hangar.
		G	138	.7	Twy front of Army Guard ramp.
		G	270	.7	On Twy J between Twys A and T.
South Boston (Danville Rgnl)	110.4/SBV	A/1500	255	16.8	Over terminal building.

**WEST VIRGINIA
VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd.	Azimuth from Fac.	Dist. from Fac.	Checkpoint Description
Lewisburg (Greenbrier Valley)	116.05/LWB	AB/ALT	Mag 236	.7	On Twy A northwest on Twy E.
Martinsburg (Eastern West Virginia Rgnl Shepherd Fld)	112.1/MRB	G	281	6.2	At apch end Rwy 35.
		G	284		D twy south of Rwy 08-26.
		G	284		Twy C intersection with Rwy 08-26.
		G	287	6.5	In front of twr on twy A. VOR receiver checkpoint OTS.
Morgantown (Morgantown Muni-Walter L. Bill Hart Fld)	111.6/MGW	G	337	5.8	Intersection of Twys A and C.
Parkersburg (Mid-Ohio Valley Rgnl)	108.6/JPU	G	211°	6.3	Intersection of Twy A and Twy D.
		G	208	6.5	Twy J and apch end Rwy 28.
Wheeling (Wheeling Ohio Co)	112.2/HLG	G	223	5.9	On twy on east side of ramp.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Charleston (Yeager)	108.8	G	

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest period activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

- (1) Been in operation for at least 1 year.
- (2) Operate year round (at least on weekends).
- (3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
CONNECTICUT			
(c) Danielson Arpt	8 NM; 211° Putnam	12,500	5 NM radius. Weekends and holidays.
(c) Ellington Arpt	17 NM; 025° Hartford.....	15,000	Fri, Sat, Sun, and occasional weekdays. 0.25 NM radius P Stone target
Harwinton	25 NM; 300° Hartford.....	7,200	0700-SS weekends.
DELAWARE			
Georgetown, Sussex Co. Arpt	10 NM; 230° Waterloo.....	12,500	0900-SS Weekends; 1700-SS Wednesday.
Selbyville, Warrington Fld	17 NM; 079° Salisbury	15,000	Weekends and holidays.
(c) Western Suxxex/Booth Fld	12 NM; 356° Salisbury	12,000	5 NM radius. SR-SS daily.
MAINE			
(c) Lebanon	13 NM; 275° Kennebunk	14,000	0800-SS daily.
Millinocket Muni Arpt	9.5 NM; 319° Millinocket.....	14,000 AGL	5 NM radius. Daily SR-SS.
MARYLAND			
Accident.....	14 NM; 275° Grantsville		
Edgewood	29 NM; 056° Baltimore.....	10,000	Weekends, evenings, occasional weekdays
Gambrills, Dairy Farm Drop Zone.....	7 NM; 198° Baltimore.....	1300 AGL	0.5 NM radius. Weekends-November thru Ap
Long Greene Drop Zone	21 NM; 038° Baltimore.....	10,000 AGL	0.5 NM radius. Weekends.
(c) Ocean City Muni Arpt.....	18 NM; 108° Salisbury	15,000	3 NM radius. 1 May-30 Nov continuous.
Patuxent River NAS (Trapnell Fld)	1.2 NM; 243° Patuxent.....	Unrestricted	0.25 NM radius. 1600-SS Mon-0800-SS Sat, Sun, Holidays
Sumang Drop Zone.....	0.7 NM; 303° Patuxent.....	Unrestricted	0.25 NM radius.
Tewey Drop Zone.....	20.3 NM; 286° Baltimore.....	3,000 AGL	0.4 NM radius. Weekends
Unity Drop Zone	24 NM; 023° Baltimore.....	10,000 AGL	1 NM radius. Weekends
Marston Mills	20 NM; 045° Marthas Vineyard..	10,000	0.4 NM; radius. Weekends
(c) Montague, Turners Falls Arpt.....	18 NM; 237° Keene	12,500 AGL	5 NM radius. SR-SS daily.
Natick Laboratory Sudbury.....	21 NM; 295° Boston	4,000 AGL	0.25 NM radius. 0800-1700 Mon-Fri
MASSACHUSETTS			
(c) Ft. Devens, Turner Drop Zone	18 NM; 115° Gardner	4,000 AGL	.5 NM radius. Daily SR-SS (occasionally nights) (occasionally up to 20,000').
Marston Mills	20 NM; 045° Marthas Vineyard..	10,000	1 NM radius 0700-SS daily
(c) Montague, Turners Falls Arpt.....	18 NM; 237° Keene	12,500 AGL	5 NM radius. SR-SS daily.
Natick Laboratory Sudbury.....	21 NM; 295° Boston	4,000 AGL	0.25 NM radius. 0800-1700 Mon-Fri

PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
(c) Orange Muni Arpt	10 NM; 292° Gardner	14,000	1 NM radius. Thu-Sun and holidays. SR-one hr after SS. Boston Center 123.75
(c) Pepperell, Sports Center Arpt	13 NM; 233° Manchester.....	20,000 AGL	3 NM radius. Daily SR-SS frequently ngt ops.
NEW JERSEY			
(c) Belmar/Farmingdale, Monmouth Executive Arpt	7 NM; 170° Colts Neck	13,500	3 NM radius. SR-SS Daily.
(c) Chatsworth, Coyle Fld	1 NM; 130° Coyle	2,000 AGL	Continuous. Heavy equip and paratroopers
(c) Cross Keys	10 NM; 355° Cedar Lake	14,000	1.5 NM radius. Daily SR-SS.
(c) Lakehurst NAES (Maxfield Fld)	0.9 NM; 280° Navy Lakehurst TACAN	12,500	0.3 NM radius. Daily SR-SS. Cargo drops ngt 2000' and below
(c) Sussex	9 NM; 350° Sparta	15,000	1.5 NM radius. Daily 0700-SS.
NEW YORK			
(c) Albion, Pine Hill Arpt	22 NM; 055° Buffalo	12,000'	2 NM radius. 0800-1 hour after SS, Wed thru Sun and holidays.
Arcade Tri-Co Arpt	24 NM; 162° Buffalo	10,000	5 NM radius. 0900-2100 SR-SS, Sat, Sun, and Wed.
Bloomingburg, Shan-Wan-Ga Valley Arpt	13 NM; 050° Huguenot	12,000	5 NM radius. 0900-SS daily.
(c) Calverton	1.5 NM; 150° Calverton	13,500	2 NM radius. Daily SR-SS.
(c) Duaneburg Arpt	14 NM; 280° Albany	13,000	3 NM radius. SR-SS daily.
(c) East Moriches, Spadaro Arpt	7 NM; 170° Calverton	14,000	1 NM radius, 0800-SS Sat and Sun. 1600-SS Wed.
Fort Drum	23 NM; 060° Watertown	1,000 AGL	1 NM radius. SR-SS Mon-Fri.
Gardiner Arpt	15 NM; 284° Kingston	14,500	4 NM radius. Daily SR-SS.
Hamilton Muni Arpt	13 NM; 085° Georgetown	10,000 AGL	5 NM radius. Weekends.
(c) Java	21 NM; 157° Buffalo	13,000	5 NM radius. Daily SR-SS, occasionally til 2400
Johnstown, Fulco Arpt	27 NM; 315° Albany	15,000 AGL	3 NM radius. SR-SS Fri, Sat, Sun & holidays. Occasionally other days.
(c) Lexington-Prattville, Maben Arpt	26 NM; 089° De Lancey	22,000	3 NM radius. SR-SS daily.
Newfane, Hollands Intl Arpt	21 NM; 353° Buffalo	18,000	5 NM radius. SR-SS daily; occasional ngt.
New Paltz, Stanton Arpt	15 NM; 301° Kingston	14,000	3NM radius. Sat, Sun and holidays SR-SS, occasional ngt and other days.
(c) Ovid Arpt	18 NM; 313° Ithaca	13,500	2 NM radius. 0600-2400 daily.
(c) Quaker Street, Knox Arpt	15 NM; 280° Albany	14,000	3 NM radius. Daily SR-2400.
Rhinebeck, Old Rhinebeck Arpt	19 NM; 323° Pawling	4,900	2 NM radius. SR-SS Sat-Sun Jun 15-Oct 15.
(c) Scotia, Mohawk Valley	12 NM/318° Albany	12,000	5 NM radius. 0800-2400 daily.
Stormville Arpt	13 NM; 215° Pawling	13,000 AGL	Daily, SR-SS.
(c) Verona, Curtis Arpt	21 NM; 304° Utica	10,000	5 NM radius. SR-SS daily Apr 1-Nov 30.
(c) Wallkill	25 NM; 062° Huguenot	14,500 AGL	1 NM radius. Daily 1200-0200.
West Bloomfield, Fort Hill Arpt	9 NM; 070° Geneseo	15,000	1200-1 hr after SS Wed-Fri; 0800-1 hr after SS Sat, Sun & holidays; occasional ngt till 2400.
Westhampton Beach, Francis S Gabreski Arpt	10 NM; 130° Calverton	13,000' AGL	1 NM radius. Tue thru Fri 1000-1400 13,000' to sfc and 1400-2200 8,000' to sfc.
(c) West Point	22 NM; 112° Huguenot	10,000	2 NM radius. Weekdays 1200-SS, weekends, occasionally.

PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
PENNSYLVANIA			
Bethel, Grimes Arpt	16 NM; 112° Ravine	11,000	5 NM radius. SR-SS daily.
(c) Burgettstown, Starveggi Drop Zone...	9 NM; 042° Wheeling WV	2000 AGL	1 NM radius. Tue-Thur 1030-2200 occasionally (by notam) Fri-Sun 0700-1800.
(c) Chambersburg Franklin Co Rgnl Arpt	14NM; 087° St Thomas	15,000 AGL	2NM radius. SR-SS daily.
Connellsville Arpt	14 NM; 272° Indian Head	15,000	4NM radius. Mar-Nov. Fri-Sun SR SS.
Culmererville Arpt	22 NM; 125° Ellwood City	11,500 AGL	Daily SR-SS
Doylestown.....	8 NM; 303° Yardley.....	12,500	Sat and Sun SR-SS
(c) East Stroudsburg, Stroudsburg-Pocono Arpt	13.4 NM; 291° Stillwater	14,500	2.5 NM radius. 0600-2200 daily.
(c) Fort Indiantown Gap-Muir AAF, Cold Steel Drop Zone	6.7 NM; 172°Ravine.....	800-2000 AGL	By NOTAM only. Military use. 5 NM radius.
(c) Freedom, Kindelberger Landing Strip	8.5 NM; 175° Ellwood City	14,500	3 NM radius. Weekends and holidays SR-SS, Wed 1600-SS, and occasional nghts.
Freefall Oz Arpt	14 NM; 252° Wellsville	12,500	5 NM radius. Wed-Sun 1300-2359.
(c) Germansville, Flying M Aerodrome ...	9 NM; 003° East Texas.....	14,000	1 NM radius. 0900-SS daily.
(c) Grove City Arpt.....	19.3 NM; 011° Elwood City	15,000	3 NM radius. 0800-1900 EST, 0900-2230 EDT daily.
(c) Hazleton Muni Arpt	6 NM; 081° Hazleton	14,500	SR-SS weekends and holidays; 1500-SS weekdays
(c) Jeannette, Greensburg Jeannette Rgnl	19 NM; 089° Allegheny	12,000	1 NM radius. 1 Apr-31 Oct, Wed 1700-2100, Sat/Sun 1000-2100.
Jersey Shore, Hinaman Acres Arpt	23 NM; 240° Williamsport.....	13,000	Tue and Thur 1600-SS; Sat and Sun 0800-SS.
Littlestown, Kingsdale Airpark	13 NM; 345° Westminster	10,500	2 NM radius. 0900-2000 daily.
Meadville, Port Meadville	19 NM; 311° Franklin	12,500	Weekends SR-SS.
(c) Mt. Joy/Marietta, Donegal Springs Airpark	12 NM; 272° Lancaster	15,000	2 NM radius. SR-SS daily.
North East, Moorhead Arpk.....	21 NM; 065° Erie.....	12,000	5 mi radius. Extensive skydiving activities 1600-2100 weekdays and 0900-2100 weekends from surface to 12,000 ft MSL.
(c) Perkasie, Pennridge Arpt	15.9 NM; 060° Pottstown	14,500	5 NM radius. SR-SS daily, nights by NOTAM.
(c) Tunkhannock, Skyhaven Arpt	19 NM; 333° Wilkes-Barre.....	13,500 AGL	5 NM radius. SR-SS daily.
(c) Worthington, J.T. Willie Arpt	25 NM; 098° Ellwood City	14,000	1 NM radius. Weekends and holidays SR-SS, Fri 2200-SS, occasional nghts.
RHODE ISLAND			
Greene, Riconn Arpt	15 NM; 060° Norwich	12,500	Daily SR-SS.
(c) Newport State	13.3 NM; 164° Providence	10,000	1 NM radius. SR-SS daily Apr 1-Nov 30.
(c) Pawtucket, North Central State Arpt	12 NM; 001° Providence	13,000	3 NM radius. 0800-1 hour after SS daily. Mar 27-Dec 1.
VERMONT			
(c) Addison, Ass-Pirin Acres Arpt.....	21 NM; 219° Burlington	12,000	5 NM radius. SR-SS daily. Frequent night jumps.
Shelburne Arpt	3 NM; 240° Burlington.....	15,000	2 NM radius. Daily SR-SS.
VIRGINIA			
(c) Blackstone, Allen C. Perkinson/ BAAF	16 NM; 355° Lawrenceville	12,500 AGL	1 NM radius. Daily.
Forest, New London Arpt	5 NM; 274° Lynchburg	11,000	Daily SR-SS.
(c) Fort A. P. Hill Bowling Green Drop Zone	12 NM; 192° Brooke	12,000 AGL	1 NM radius. Continuously. Frequent night drops.
(c) Fort Lee	12 NM; 262° Hopewell	2,500 AGL	0.5 NM radius. Daily.
(c) Fort Pickett Dove Drop Zone.....	19 NM; 009° Lawrenceville	12,500 AGL	Drop Zone 1500 yards by 1000 yards. Daily.
(c) Louisa Co/Freeman Fld	8.6 NM; 097° Gordonsville	15,000	3 NM radius. 0800-dusk.

PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
Moneta, Smith Mountain Lake Arpt.....	19.2 NM; 246° Lynchburg	13,500	3 NM radius. SR-SS Fri, Sat, Sun, and holidays.
(c) Norfolk Intl Arpt	8.5 NM; 085° Norfolk	13,000	Mon-Fri during daylgt hrs.
Oceana NAS.....	1.0 NM; 228° Oceana.....	12,500	Sat and Sun 0800-1200
(c) Orange Co Arpt	14.9 NM; 026° Gordonsville	15,000	3 NM radius. Daily SR-SS, frequently ngt ops.
(c) Quantico	11.5 NM; 349° Brooke	10,000	1 NM radius unscheduled weekends.
(c) Somerville, Hartwood Arpt.....	15 NM; 137° Casanova	13,000	2 NM radius. Weekends, holidays, occasionally other weekdays summer months.
(c) Suffolk Executive Arpt	20 NM; 104° Franklin	13,500	5 NM radius. SR-SS daily.
Warrenton, Flying Circus Aerodrome	8.5 NM; 132° Casanova	7,000	Sat/Sun, June 7-Oct 25, 1000-1959.
Waynesboro, Eagle's Nest Arpt	13 NM; 042° Montebello.....	10,000	1300-SS daily.
(c) West Point, Middle Peninsula Rgnl	4.4 NM; 340° Harcum	14,000	SR-SS weekends and holidays.
WEST VIRGINIA			
(c) Arthurdale, Titus Field	5 NM; 175° Morgantown	15,000 AGL	1 NM radius. Daily 0900-2100.
Buckhannon-Upshur Co.....	9 NM; 300° Elkins.....	15,000	1 NM radius. Weekdays and holidays
Huntington, Leann Drop Zone	15 NM; 230° Henderson	10,000 AGL	0.3 NM radius. Weekends.
Huntington, Debra Drop Zone	5 NM; 120° Henderson	10,000 AGL	0.5 NM radius. Weekends.
Morgantown, Bacon Drop Zone	5 NM; 150° Morgantown	10,000 AGL	0.5 NM radius. Weekends.
Morgantown, Cider Drop Zone	17 NM; 180° Morgantown	12,500 AGL	0.3 NM radius. Weekends.
Morgantown, Dawson AAF	12 NM; 126° Morgantown	10,000 AGL	0.3 NM radius. Weekends.
Morgantown, Doubt Drop Zone.....	12 NM; 140° Morgantown	12,500 AGL	1 NM radius. Weekends.
Morgantown, Float Drop Zone	13 NM; 110° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Guide Drop Zone	13 NM; 080° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Melon Drop Zone	13 NM; 097° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Piker Drop Zone	20 NM; 135° Morgantown	12,500 AGL	0.3 NM radius. Weekends.
Ravenswood, Jackson Co Arpt	41 NM; 215° Parkersburg	12,500 AGL	1000-SS Weekends.
Ripley, Evans Drop Zone.....	12 NM; 070° Henderson	12,000	1 NM radius. 0800-SS local, weekends.
Summersville Arpt.....	15 NM; 352° Rainelle	14,500	5 NM radius daily SR-SS.
Westover, Blue Horizon Drive-In	13 NM; 320° Morgantown	12,500	Weekends and holidays SR-SS.

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown — route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

BALTIMORE-WASHINGTON HELICOPTER ROUTE CHART

8th Edition, 30 Jul 2009

OBSTRUCTIONS

27 Aug 2009 – 3 Jun 2010 No Major Changes.
29 Jul 2010 Add obst 688' MSL (348' AGL) UC, 39°28'15"N, 76°39'44"W.
23 Sep 2010 No Major Changes.

AIRPORTS

27 Aug 2009 No Major Changes.
22 Oct 2009 Change CTA 122.9 to 123.025 at PIER 7 heliport. 39°16'20"N, 76°34'18"W.
Delete BOLLING AFB heliport, 38°50'34"N, 77°00'58"W.
17 Dec 2009 – 11 Feb 2010 No Major Changes.
8 Apr 2010 Change WASHINGTON DULLES INTL ATCT freq from 128.425 to 134.425, 38°56'40"N, 77°27'21"W.
3 Jun 2010 – 29 Jul 2010 No Major Changes.
23 Sep 2010 Delete BELTSVILLE SHOP heliport, 39°03'00"N, 76°53'26"W.

NAVAIDS

27 Aug 2009 – 3 Jun 2010 No Major Changes.
29 Jul 2010 Add DAVEE NDB, freq 223, ident (DAA), class H, 38°39'42"N, 77°06'36"W.
23 Sep 2010 No Major Changes.

AIRSPACE

27 Aug 2009 – 23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

27 Aug 2009 – 23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

27 Aug 2009 – 23 Sep 2010 No Major Changes.

MISCELLANEOUS

27 Aug 2009 – 17 Dec 2009 No Major Changes.
11 Feb 2010 Revise HAYMARKET reporting point, 38°49.00'N, 77°38.27'W.
8 Apr 2010 – 23 Sep 2010 No Major Changes.

BALTIMORE-WASHINGTON TERMINAL AREA CHART**81st Edition, 29 Jul 2010****OBSTRUCTIONS****29 Jul 2010** No Major Changes.**23 Sep 2010** Add obst 412' MSL (230' AGL), 38°22'46"N, 77°25'07"W.
Add obst 723' MSL (270' AGL)UC, 39°45'39"N, 76°01'48"W.**AIRPORTS****29 Jul 2010 – 23 Sep 2010** No Major Changes.**NAVAIDS****29 Jul 2010** No Major Changes.**23 Sep 2010** Delete COGAN NDB, 39°05'11"N, 78°04'07"W.**AIRSPACE****29 Jul 2010 – 23 Sep 2010** No Major Changes.**SPECIAL USE AIRSPACE****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****29 Jul 2010 – 23 Sep 2010** No Major Changes.**BOSTON HELICOPTER ROUTE CHART****6th Edition, 20 Dec 2007****OBSTRUCTIONS****20 Dec 2007 – 23 Sep 2010** No Major Changes.**AIRPORTS****20 Dec 2007 – 10 Apr 2008** No Major Changes.**5 Jun 2008** Revise AMES HELIPORT position to, 42°37'53"N, 70°51'54"W.**31 Jul 2008 – 2 Jul 2009** No Major Changes.**27 Aug 2009** Revise MASS GENERAL heliport position to, 42°21'49"N, 71°04'08"W.**22 Oct 2009 – 23 Sep 2010** No Major Changes.**NAVAIDS****20 Dec 2007 – 23 Sep 2010** No Major Changes.**AIRSPACE****20 Dec 2007 – 23 Sep 2010** No Major Changes.**SPECIAL USE AIRSPACE****20 Dec 2007 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****20 Dec 2007 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****20 Dec 2007 – 23 Sep 2010** No Major Changes.

BOSTON TERMINAL AREA CHART**76th Edition, 6 May 2010****OBSTRUCTIONS****3 Jun 2010 – 29 Jul 2010** No Major Changes.**23 Sep 2010** Add obst 580'MSL (400'AGL) UC, 41°36'30"N, 70°36'32"W.**AIRPORTS****3 Jun 2010** Change DOWNTOWN PROVIDENCE from (R19) to (RI9) 41°49'27"N, 71°24'31"W.**29 Jul 2010 – 23 Sep 2010** No Major Changes.**NAVAIDS****3 Jun 2010 – 23 Sep 2010** No Major Changes.**AIRSPACE****3 Jun 2010 – 23 Sep 2010** No Major Changes.**SPECIAL USE AIRSPACE****3 Jun 2010 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****3 Jun 2010 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****3 Jun 2010 – 23 Sep 2010** No Major Changes.**CF-18 WORLD AERONAUTICAL CHART****39th Edition 22 Oct 2009****OBSTRUCTIONS****22 Oct 2009 – 17 Dec 2009** No Major Changes.**11 Feb 2010** Change obst from 1140'MSL(520'AGL) to 1579'MSL(679'AGL), 42°48'02"N, 89°03'16"W.

Add Obst 1131'MSL(500'AGL), 41°31'49"N, 87°12'52"W.

Add Obst 1820'MSL(500'AGL), 40°44'50"N, 82°18'54"W.

Add Obst 1682'MSL(500'AGL), 40°26'48"N, 79°45'26"W.

8 Apr 2010 – 23 Sep 2010 No Major Changes.**AIRPORTS****22 Oct 2009 – 23 Sep 2010** No Major Changes.**NAVAIDS****22 Oct 2009 – 23 Sep 2010** No Major Changes.**AIRSPACE****22 Oct 2009 – 23 Sep 2010** No Major Changes.**SPECIAL USE AIRSPACE****22 Oct 2009 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****22 Oct 2009 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****22 Oct 2009 – 23 Sep 2010** No Major Changes.

CINCINNATI SECTIONAL**84th Edition, 1 Jul 2010****OBSTRUCTIONS****29 Jul 2010** Add obst 2206' MSL (310' AGL), 37°16'09"N, 82°55'58"W.

Add obst 2556' MSL (304' AGL) UC, 38°57'53"N, 80°01'49"W.

Add obst 1190' MSL (317' AGL) UC, 39°06'36"N, 82°41'29"W.

Change obst from 2110' MSL (260' AGL) to 2210' MSL (260' AGL), 36°23'13"N, 84°20'11"W.

23 Sep 2010 Add obst 1088' MSL (299' AGL), 38°48'58"N, 84°46'53"W.

Add obst 1804' MSL (355' AGL), 37°27'37"N, 79°59'39"W.

Add obst 1393' MSL (285' AGL), 36°35'10"N, 80°08'07"W.

Add obst 927' MSL (257' AGL) UC, 36°24'41"N, 79°02'46"W.

Add obst 636' MSL (310' AGL), 36°24'11"N, 77°55'45"W.

Add obst 2052' MSL (315' AGL), 36°49'13"N, 83°19'44"W.

Add obst 647' MSL (400' AGL), 36°12'41"N, 78°04'09"W.

Add obst 1158' MSL (308' AGL) UC, 38°33'10"N, 82°23'38"W.

Add obst 1342' MSL (355' AGL) UC, 39°20'19"N, 78°45'27"W.

Add obst 1509' MSL (255' AGL) UC, 39°42'41"N, 80°07'17"W.

AIRPORTS**29 Jul 2010** No Major Changes.**23 Sep 2010** Delete abandoned arpt symbol, 39°09'00"N, 80°12'00"W.

Delete abandoned arpt symbol, 37°06'00"N, 81°50'00"W.

Delete Kite arpt, 36°31'00"N, 82°44'00"W.

Change RP 31 to RP * at GRANT CO arpt, 38°59'00"N, 79°08'00"W.

Delete RP 18 at GREATER PORTSMOUTH RGNL arpt, 38°50'25"N, 82°50'50"W.

NAVAIDs**29 Jul 2010** No Major Changes.**23 Sep 2010** Shutdown AZALEA PARK NDB, 38°00'36"N, 78°31'05"W.

Delete COGAN NDB, 39°05'11"N, 78°04'06"W.

AIRSPACE**29 Jul 2010** No Major Changes.**23 Sep 2010** Revise Mount Airy, NC Class E: That airspace extending upward from 700 feet above the surface within a 9-mile radius of the Mount Airy-Surry County Airport and within 3.9 miles each side of the 353° bearing from the airport extending from the 9-mile radius to 15.3 miles north of the Mount Airy-Surry County Airport.**SPECIAL USE AIRSPACE****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****29 Jul 2010 – 23 Sep 2010** No Major Changes.

DETROIT SECTIONAL
81st Edition, 23 Sep 2010

OBSTRUCTIONS

23 Sep 2010 No Major Changes.

AIRPORTS

23 Sep 2010 No Major Changes.

NAVAIDS

23 Sep 2010 No Major Changes.

AIRSPACE

23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

23 Sep 2010 No Major Changes.

MISCELLANEOUS

23 Sep 2010 Change MEF 2⁹ to 3⁰ in quadrant 41°30'00" - 42°00'00"N, 76°30'00" - 77°00'00"W.

HALIFAX SECTIONAL
83rd Edition, 26 Aug 2010

OBSTRUCTIONS

23 Sep 2010 Add obst 641' MSL (256' AGL) UC, 44°37'01"N, 68°42'44"W.

AIRPORTS

23 Sep 2010 Change CTAF freq. 122.8 to 122.7 AT NORTHERN AROOSTOCK RGNL arpt, 47°17'08"N, 68°18'46"W.

NAVAIDS

23 Sep 2010 No Major Changes.

AIRSPACE

23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

23 Sep 2010 No Major Changes.

MISCELLANEOUS

23 Sep 2010 No Major Changes.

MONTREAL SECTIONAL
83rd Edition, 26 Aug 2010

OBSTRUCTIONS

23 Sep 2010 Add obst 641' MSL (256' AGL) UC, 44°37'01"N, 68°42'44"W.

AIRPORTS

23 Sep 2010 No Major Changes.

NAVAIDs

23 Sep 2010 No Major Changes.

AIRSPACE

23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

23 Sep 2010 No Major Changes.

MISCELLANEOUS

23 Sep 2010 No Major Changes.

NEW YORK HELICOPTER ROUTE CHART
9th Edition, 6 May 2010

OBSTRUCTIONS

3 Jun 2010 – 23 Sep 2010 No Major Changes.

AIRPORTS

3 Jun 2010 – 23 Sep 2010 No Major Changes.

NAVAIDs

3 Jun 2010 – 23 Sep 2010 No Major Changes.

AIRSPACE

3 Jun 2010 – 23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MISCELLANEOUS

3 Jun 2010 – 23 Sep 2010 No Major Changes.

NEW YORK SECTIONAL
81st Edition, 6 May 2010

OBSTRUCTIONS

3 Jun 2010 No Major Changes.

29 Jul 2010 Add obst 407' MSL (320' AGL) UC, 43°48'51"N, 69°56'28"W.

Add obst 772' MSL (466' AGL) UC, 40°15'04"N, 74°10'47"W.

Add obst 1453' MSL (256' AGL) UC, 41°07'43"N, 76°32'41"W.

23 Sep 2010 Add obst 580' MSL (400' AGL) UC, 41°36'30"N, 70°36'32"W.

Add obst 1365' MSL (380' AGL) UC, 42°35'22"N, 72°04'40"W.

AIRPORTS

3 Jun 2010 Delete CTAF freq. 122.9 at LUTHER arpt, 43°01'45"N, 75°50'43"W.

29 Jul 2010 No Major Changes.

23 Sep 2010 Delete MAUS MARINELAND spb, 42°48'37"N, 76°18'38"W.

Delete WELLIS spb, 42°50'59"N, 73°54'17"W.

Delete QUADDICK LAKE spb, 41°57'30"N, 71°49'00"W.

Delete KIRKWOOD arpt, 42°00'01"N, 75°45'36"W.

NAVAIDS

3 Jun 2010 No Major Changes.

29 Jul 2010 Delete WATERBURY NDB, 41°31'45"N, 73°08'37"W.

23 Sep 2010 No Major Changes.

AIRSPACE

3 Jun 2010 – 29 Jul 2010 No Major Changes.

23 Sep 2010 Change PORTLAND Class C freq from 119.75(SOUTH) to 119.75.

Change PORTLAND Class C freq from 125.5(NORTH) to 125.5.

Change PORTLAND Class C freq from 353.9(NORTH) to 353.9.

Change PORTLAND Class C freq from 381.2(SOUTH) to 381.2.

SPECIAL USE AIRSPACE

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MISCELLANEOUS

3 Jun 2010 – 29 Jul 2010 No Major Changes.

23 Sep 2010 Change MEF 0⁸ to 0⁹ in quadrant 40°00' - 40°30'N, 74°00' - 74°30'W.

NEW YORK TERMINAL AREA CHART

79th Edition, 6 May 2010

OBSTRUCTIONS

3 Jun 2010 No Major Changes.

29 Jul 2010 Add obst 772' MSL (466' AGL) UC, 40°15'04"N, 74°10'47"W.

23 Sep 2010 No Major Changes.

AIRPORTS

3 Jun 2010 – 23 Sep 2010 No Major Changes.

NAVAIDS

3 Jun 2010 – 23 Sep 2010 No Major Changes.

AIRSPACE

3 Jun 2010 – 23 Sep 2010 No Major Changes.

SPECIAL USE AIRSPACE

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MILITARY TRAINING ROUTES

3 Jun 2010 – 23 Sep 2010 No Major Changes.

MISCELLANEOUS

3 Jun 2010 – 29 Jul 2010 No Major Changes.

23 Sep 2010 Change MEF 0⁸ to 0⁹ in quadrant 40°15' – 40°30'N, 74°00' – 74°15'W.

PHILADELPHIA TERMINAL AREA CHART**72nd Edition, 29 Jul 2010****OBSTRUCTIONS****29 Jul 2010 – 23 Sep 2010** No Major Changes.**AIRPORTS****29 Jul 2010 – 23 Sep 2010** No Major Changes.**NAVAIDs****29 Jul 2010 – 23 Sep 2010** No Major Changes.**AIRSPACE****29 Jul 2010** No Major Changes.**23 Sep 2010** Change PHILADELPHIA Class B freq from 126.6 to 133.875.**SPECIAL USE AIRSPACE****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****29 Jul 2010 – 23 Sep 2010** No Major Changes.**MISCELLANEOUS****29 Jul 2010 – 23 Sep 2010** No Major Changes.**PITTSBURGH TERMINAL AREA CHART****74th Edition, 23 Sep 2010****OBSTRUCTIONS****23 Sep 2010** No Major Changes.**AIRPORTS****23 Sep 2010** No Major Changes.**NAVAIDs****23 Sep 2010** No Major Changes.**AIRSPACE****23 Sep 2010** No Major Changes.**SPECIAL USE AIRSPACE****23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****23 Sep 2010** No Major Changes.**MISCELLANEOUS****23 Sep 2010** No Major Changes.

**WASHINGTON SECTIONAL
88th Edition, 29 Jul 2010****OBSTRUCTIONS****29 Jul 2010** No Major Changes.**23 Sep 2010** Add obst 412'MSL (230'AGL), 38°22'46"N, 77°25'07"W.

Add obst 723'MSL (270'AGL)UC, 39°45'39"N, 76°01'48"W.

Add obst 636'MSL (310'AGL), 36°24'11"N, 77°55'45"W.

Add obst 226'MSL (220'AGL), 36°13'42"N, 76°08'05"W.

Add obst 647'MSL (400'AGL), 36°12'41"N, 78°04'09"W.

Add obst 1342'MSL (355'AGL)UC, 39°20'19"N, 78°45'27"W.

AIRPORTS**29 Jul 2010 - 23 Sep 2010** No Major Changes.**NAVAIDS****29 Jul 2010** No Major Changes.**23 Sep 2010** Shutdown AZALEA PARK NDB, 38°00'37"N, 78°31'05"W.

Delete COGAN NDB, 39°05'11"N, 78°04'07"W.

AIRSPACE**29 Jul 2010** No Major Changes.**23 Sep 2010** Change PHILADELPHIA Class B freq from 126.6 to 133.875.**SPECIAL USE AIRSPACE****29 Jul 2010 - 23 Sep 2010** No Major Changes.**MILITARY TRAINING ROUTES****29 Jul 2010 - 23 Sep 2010** No Major Changes.**MISCELLANEOUS****29 Jul 2010 - 23 Sep 2010** No Major Changes.

SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private-use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

UNITED STATES

FACILITY NAME	CHART & PANEL
Frankfort, IL (LL4Ø)	L-28H
Chicago App/Dep Con 133.1 285.6	
Glasgow Industrial, MT (Ø7MT)	H-1E, 2F, L-13D
Salt Lake Center App/Dep Con 126.85 305.2	
USAF Academy Bullseye Aux Airstrip, CO (C09Ø)	L-10F
ASOS 118.325	
West Kentucky Airpark, KY (5KY3)	L-16I
Memphis Center App/Dep Con 133.65 292.15	
William P Gwinn, FL (Ø6FA)	H-8I, L-23C
Gwinn Tower 120.4 279.25 (Mon-Fri 1300-2100Z‡)	
Gnd Con 121.65 279.25	

CANADA

FACILITY NAME	CHART & PANEL
Abbotsford, BC (CYXX)	H-1B, L-12F
ATIS 119.8 (1500-0700Z‡)	
Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8	
Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500-0700Z‡) Gnd Con 121.8	
MF 119.4 295.0 (0700-1500Z‡) (Shape irregular to 4500')	
Amos/Magny, QC (CYEY)	H-11B
Montreal Center App/Dep Con 125.9	
Atikokan Muni, ON (CYIB)	L-14I
MF 122.3 (5 NM to 4500' No ground station)	
Barrie-Orillia (Lake Simcoe Rgnl), ON (CYLS)	H-11B, L-31D
AWOS 122.55 (Pvt)	
Toronto Center App/Dep Con 124.025	
Bar River, ON (CPF2)	L-31C
Toronto Center App/Dep Con 132.65	
Bathurst, NB (CZBF)	L-32J
Moncton Center App/Dep Con 134.25	
Boundary Bay, BC (CZBB)	H-1B, L-1E
ATIS 125.5 (1500-0700Z‡)	
Vancouver App/Dep Con 132.3 363.8	
Tower 118.1 (Inner) 127.6 (Outer) (1500-0700Z‡) Gnd Con 124.3	
MF 118.1 (0700-1500Z‡ to 2000'. Vancouver Trml 125.2 above 2000'. Shape irregular to 2500').	
Brampton, ON (CNC3)	L-31D
Toronto Trml App/Dep Con 119.3 253.1	
Brandon Muni, MB (CYBR)	H-2H
Winnipeg Center App/Dep Con 132.25 285.4	
MF 122.1 (5 NM to 4000')	
Brantford, ON (CYFD)	L-31D
Toronto Trml App/Dep Con 128.27	
Brockville-Thousand Islands Rgnl Tackaberry, ON (CNL3)	L-32G
Montreal Center App/Dep Con 134.675	
Bromont, QC (CZBM)	L-32G
Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400')	
Burlington Airpark, ON (CZBA)	L-31D
Toronto Center App/Dep Con 119.3 253.1	
Castlegar/West Kootenay Rgnl, BC (CYCG)	H-1C
Vancouver Center App/Dep Con 134.2 227.3	
MF 122.1 (5 NM to 6500')	
Centralia/James T. Flg Muni, ON (CYCE)	H-10G, 11B, L-31D
Toronto Center App/Dep Con 135.30	
Charlottetown, PE (CYYG)	H-11E, L-32J
Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')	
Chatham-Kent, ON (CNZ3)	H-10G, L-30G
Cleveland Center App/Dep Con 132.25	

FACILITY NAME

Collingwood, ON (CNY3)	H-11B, L-31D
Toronto Center App/Dep Con 124.02	
Cornwall Rgnl, ON (CYCC)	L-32G
Boston Center App/Dep Con 135.25 377.1	
Cranbrook/Canadian Rockies Intl, BC (CYXC)	H-1C
Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')	
Debert, NS (CCQ3)	H-11E, L-32J
Halifax Trml App/Dep Con 119.2	
Digby, NS (CYID)	L-32J
Moncton Center App/Dep Con 123.9	
Downsview, ON (CYZD)	H-11B, L-31E
Toronto Center App/Dep Con 133.4	
MF 126.2 (1300-2300Z‡, 3 NM to 1700')	
Drummondville, QC (CSC3)	L-32H
Montreal Center App/Dep Con 132.35	
Earlton (Timiskaming Rgnl), ON (CYXR)	H-11B
MF 122.0 (5 NM to 3800')	
AWOS 128.6	
Elliot Lake Muni, ON (CYEL)	L-31C
Toronto Center App/Dep Con 135.4	
Fort Frances Muni, ON (CYAG)	L-14H
Minneapolis Center App/Dep Con 120.9	
Fredericton Intl, NB (CYFC)	H-11E, L-32I
ATIS 127.55 (1045-0245Z‡, OT AWOS)	
Moncton Center App/Dep Con 124.3 135.5 270.8	
Tower 119.0 (1045-0245Z‡) Gnd Con 121.7 (1045-0245Z‡)	
MF 119.0 (0245-1045Z‡, 5 NM to 3500')	
Goderich, ON (CYGD)	H-11B, L-31D
Toronto Center App/Dep 135.3 266.3	
Greenwood, NS (CYZX)	H-11E, L-32J
ATIS 128.85 244.3 (1100-0000Z‡)	
App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3	
Gnd Con 133.75 289.4 Clns Del 128.025 283.9	
Grimsby Air Park, ON (CNZ8)	L-31E
Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	
Halifax/Shearwater, NS (CYAW)	H-11E, L-32J
ATIS 129.175 (Ltd hrs)	
App/Dep Con 119.2 MF Shearwater Advisory 119.0 126.2 340.2 360.2 (Ltd hrs)	
Gnd Con 121.7 250.1	
Halifax/Stanfield Intl, NS (CYHZ)	H-11E, L-32J
ATIS 121.0	
Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 363.8	
Tower 118.4 236.6 Gnd Con 121.9 275.8 Clns Del 123.95	
Apron Advisory 122.125	
Hamilton, ON (CYHM)	H-10H, 11B, L-11B
ATIS 128.1	
Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0	
Gnd Con 121.6	
Kingston, ON (CYGK)	H-11C, L-31E, 32F
Montreal Center App/Dep Con 135.05 398.4 (0400-1115Z‡)	
MF 122.5 (1115-0400Z‡ 5 NM to 3300')	
Kitchener/Waterloo, ON (CYKF)	H-11B, L-31D
ATIS 125.1 (1200-0400Z‡)	
Toronto Trml App/Dep Con 128.275	
Waterloo Tower 126.0 118.55 (1200-0400Z‡) Gnd Con 121.8	
MF 126.0 (0400-1200Z‡ 5 NM to 4000')	
Lachute, QC (CSE4)	L-32G
Montreal Center App Con 124.65 132.85 268.3	
Montreal Center Dep Con 132.85 268.3	
La Tuque, QC (CYLQ)	H-11C
Montreal Center App/Dep Con 134.5	
Langley, BC (CYNJ)	L-1E
ATIS 124.5 (1630-0230Z, DT 1530-0330Z)	
Victoria Trml App/Dep Con 132.7 290.8 Tower 119.0 (1630-0230Z,	
DT 1530-0330Z)	
Gnd Con 121.9 MF 119.0 (0230-1630Z, DT 0330-1530Z 3 NM to 1900')	

SUPPLEMENTAL COMMUNICATION REFERENCE

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FACILITY NAME	CHART & PANEL
Leamington, ON (CLM2) Cleveland Center App/Dep Con 132.45	L-30F
Lethbridge, AB (CYQL) ATIS 124.4 (1300-0545Z‡) Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')	H-1D
Lindsay, ON (CNF4) Toronto Center App/Dep 134.25	L-31E, L-32F
Liverpool/South Shore Rgnl, NS (CYAU) Moncton Center App/Dep Con 123.9	L-32J
London, ON (CYXU) ATIS 127.8 (1120-0345Z‡) Toronto Center App/Dep 135.3 135.625 Tower 119.4 125.65 (1120-0345Z‡) Gnd Con 121.9 MF 119.4 (0345-1120Z‡ 5 NM to 3000')	H-10G, 11B, L-30G, 31D
Manitowaning/Manitoulin East Muni, ON (CYEM) Toronto Center App/Dep 135.4 260.9	L-31C
Maniwaki, QC (CYMW) Montreal Center App/Dep Con 126.57	L-32G
Mascouche, QC (CSK3) MF 122.35 (5 NM to 2500'. No gnd station. Excluding the portion S of the N shore of Riviere des Milles-Îles and 1 NM around Lac Agile Mascouche arpt.)	L-32G
Medicine Hat, AB (CYXH) AWOS 124.875 (0345-1245Z‡) MF 122.2 (1245-0345Z‡ 5 NM to 5400')	H-1D
Midland/Huronia, ON (CYEE) Toronto Center App/Dep 124.025	L-31D
Miramichi, NB (CYCH) Moncton Center App/Dep Con 123.7	H-11E, L-32J
Moncton/Greater Moncton Intl, NB (CYQM) ATIS 128.65 App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8 Apron Advisory 122.075	H-11E, L-32J
Mont-Laurier, QC (CSD4) Montreal Center App/Dep Con 126.57	L-32G
Montreal Intl (Mirabel), QC (CYMX) ATIS 125.7 Montreal Center App Con 124.65 132.85 268.3 Montreal Dep Con 132.85 268.3 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15	H-11C, 12K, L-32G
Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnic Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 (W-NW-NE) 268.3 VFR Advisory 134.15	H-11C, 12K, L-32G
Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15	H-11C, L-32G
Muskoka, ON (CYQA) AWOS 124.575 Timmins Radio App/Dep Con 122.3 MF 122.3 (5 NM to 3900')	H-11B, L-31D
Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 291.8 1330-0530Z‡ (5 NM to 2500')	H-1B, L-1E
North Bay, ON (CYYB) ATIS 124.9 (1130-0330Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000')	H-11B, L31D
Oshawa, ON (CYOO) ATIS 125.675 (1130-0330Z‡) Toronto Trml App/Dep Con 133.4 Tower 120.1 (1130-0330Z‡) Gnd Con 118.4 MF 120.1 (0330-1130Z‡ 5 NM to 3000')	L-31E

FACILITY NAME	
Ottawa/Carp, ON (CYRP)	L-31E, 32F
ATIS 121.15	
Ottawa Trml App/Dep Con 128.175	
Ottawa/Gatineau, QC (CYND)	H-11C, L-32G
Ottawa Trml App/Dep Con 127.7 128.175	
MF 122.3 (5 NM shape irregular to 2500')	
VFR Advisory Ottawa Trml 127.7	
Ottawa/MacDonald-Cartier Intl, ON (CYOW)	L-11C
ATIS 121.15	
Ottawa App Con 135.15 Tower 118.8 (VFR South) 120.1 (VFR North) 118.8 341.3	
Gnd Con 121.9 Clns Del 119.4	
Ottawa Dep Con 128.175	
Owen Sound/Billy Bishop Rgnl, ON (CYOS)	L-31D
Toronto Center App/Dep 132.575 290.6	
Pele Island, ON (CYPT)	L-30F
Cleveland Center App/Dep Con 126.35 360.0	
Pembroke, ON (CYTA)	H-11C, L-31E, 32F
Montreal Center App/Dep Con 135.2	
Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z‡, OT PPR)	
Penticton, BC (CYTF)	H-1B
Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100')	
Peterborough, ON (CYPQ)	H-11B, L-31E, 32F
AWOS 126.925	
Toronto Center App/Dep 134.25	
Pincher Creek, AB (CZPC)	H-1D
Edmonton Center App/Dep Con 132.75 265.2	
Pitt Meadows, BC (CYPK)	L-1E
ATIS 125.0 (1500-0700Z‡)	
Vancouver Center App Con 128.6 352.7 (Outer)	
Pitt Tower 126.3 (1500-0700Z‡) Gnd Con 123.8	
Vancouver Center Dep Con 132.3 363.8 (South)	
MF 126.3 (0700-1500Z‡) (3NM to 2500')	
Quebec/Jean Lesage Intl, QC (CYQB)	H-11D, L-32H
ATIS 134.6	
Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8	
Tower 118.65 236.6	
Gnd Con 121.9 250.0	
Riviere Du Loup, QC (CYRI)	H-11D
AWOS 122.025 (Pvt)	
Montreal Center App/Dep Con 125.1 299.6	
Rouyn Noranda, QC (CYUY)	H-11B
Montreal Center App/Dep Con 125.9	
MF 122.2 (5 NM to 4000')	
Saint John, NB (CYSJ)	H-11E, L-32J
Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')	
Sarnia (Chris Hadfield), ON (CYZR)	H-10G, 11B, L-30F
AWOS 119.125	
Toronto Center App/Dep Con 134.375	
Sault Ste Marie, ON (CYAM)	H-2K, L-31B
ATIS 133.05 (1300-0100Z‡)	
Toronto Center App/Dep Con 132.65 344.5	
Tower 118.8 (1300-0100Z‡) Gnd Con 121.7 (1300-0100Z‡)	
MF 118.8 (0100-1300Z‡ 5 NM irregular shape to 3000')	
Sherbrooke, QC (CYAM)	H-11D, L-32H
AWOS 126.25	
Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')	
South Renfrew Muni, ON (CNP3)	L-31E, 32F
Montreal Center App/Dep 124.275	
Southport, MB (CYPG)	H-2H
ATIS 120.85 (Mon-Fri 1400-2300Z‡ except holidays)	
Tower 126.2 384.2 (Mon-Fri 1400-2300Z‡ except holidays)	
Gnd Con 121.7 275.8	

SUPPLEMENTAL COMMUNICATION REFERENCE

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FACILITY NAME	CHART & PANEL
Springwater Barrie Airpark, ON (CNA3)	L-31D
Toronto Center App/Dep Con 124.025	
St. Catherines/Niagara District, ON (CYSN)	H-10H, 11B, L-31E
ATIS 128.525 (1215-0200Z‡)	
Toronto Trml App/Dep Con 133.4 253.1	
MF 123.25 (1215-0200Z‡ 5 NM to 3300')	
St. Frederic, QC (CSZ4)	L-32H
Montreal Center App/Dep Con 135.025 270.9	
St. Georges, QC (CYSG)	H-32H, L-11D
Montreal Center App/Dep Con 132.35	
MF 122.15 (5 NM 3900' ASL)	
St. Jean, QC (CYJN)	L-32G
Montreal Center App/Dep Con 125.15 268.3	
Tower 118.2 (Apr-Oct 1230-0230Z‡ Nov-Mar 1300-0200Z‡)	
Gnd Con 121.7	
Sudbury, ON (CYSB)	H-31B, 10G, L-31D
ATIS 127.4	
Toronto Center App/Dep Con 135.5	
MF 125.5 (7 NM to 4000')	
Summerside, PE (CYSU)	H-11E, L-32J
AWOS 122.55 (Pvt)	
Moncton Center App/Dep Con 124.4 384.8	
Thunder Bay, ON (CYQT)	H-2J, L-14J
ATIS 128.8 (1100-0400Z‡)	
Winnipeg Center App/Dep Con 132.125	
Tower 118.1 (1100-0400Z‡) Gnd Con 121.9 (1100-0400Z‡)	
App/Dep 119.2 MF 118.1 (0400-1100Z‡ 5 NM to 4000')	
Timmins/Victor M. Power, ON (CYTS)	H-11B
ATIS 124.95 (1000-0500Z‡)	
Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000')	
Toronto/Buttonville Muni, ON (CYKZ)	L-31E
ATIS 127.1 (1200-0400Z‡)	
Toronto Trml App/Dep Con 133.4	
Tower 124.8 119.9 (1200-0400Z‡) Gnd Con 121.8 (1200-0400Z‡)	
MF 124.8 (0400-1200Z‡ No gnd station. 5 NM shape irregular to below 2500')	
Toronto/Billy Bishop Toronto City Airport, ON (CYTZ)	L-31E
ATIS 133.6 (1130-0400Z‡)	
App/Dep Con 133.4	
Tower 118.2 119.2 (1130-0400Z‡) Gnd Con 121.7	
Toronto/Lester B Pearson Intl, ON (CYYZ)	H-11B, L-31D
ATIS 120.825	
App Con 124.475 125.4 132.8 Dep Con 127.575 128.8	
Tower 118.35 118.7 Gnd Con 119.1 121.65 121.9	
Cinc Del 121.3 (1200-0400Z‡)	
Trenton, ON (CYTR)	H-11C, L-31E, 32F
ATIS 135.45 257.7	
App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8	
Cinc Del 124.35 286.4	
Trenton/Mountain View, ON (CPZ3)	H-11C, L-31E, 32F
Trenton Mil Advisory 268.0	
Trois-Rivières, QC (CYRQ)	H-11C, L-32H
Montreal Center App/Dep Con 128.225 229.2	
MF 123.0 (5 NM to 3200')	
Val-D'or, QC (CYVO)	H-11B
Montreal Center App/Dep Con 125.9 308.3	
MF 118.5 (1030-0325Z‡ 5 NM to 4000')	
Vancouver Intl, BC (CYVR)	H-1B, L-1E
ATIS 124.6 124.75	
App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner)	
Dep Con 126.125 (north) 132.3 (south) 363.8	
Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6	
Gnd Con 121.7 (south) 127.15 (north) 275.8 Cinc Del 121.4	

CHART & PANEL

FACILITY NAME		CHART & PANEL
Victoria Intl, BC (CYYJ)		H-1B, L-1E
ATIS 118.8 (1400-0800Z‡)		
App Con 125.95 Dep Con 133.85		
Tower 119.1 (Outer) 119.7 (Inner) 239.6		
Gnd Con 121.9 361.4 (1400-0800Z‡ OT ctc Kamloops 119.7)		
Clns Del 126.4 (1400-0800Z‡)		
Victoriaville, QC (CSR3)		L-32H
Montreal Center App Con 132.35		
Waterville/Kings Co Muni, NS (CCW3)		L-32J
Greenwood Trml App/Dep Con 120.6 335.9		
Greenwood Tower 119.5 324.3		
Wiarton, ON (CYVV)		H-11B, L-31D
Toronto Center App/Dep Con 132.575		
MF 122.2 (5 NM to 3700')		
Windsor, ON (CYQG)		H-10G, L-8J
ATIS 134.5 (1130-0330Z‡)		
Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2		
Tower 124.7 (1130-0330Z‡) Gnd Con 121.7 (1130-0330Z‡)		
MF 124.7 (0330-1130Z‡ 6 NM irregular shape to below 3000')		
VFR Advisory Detroit App Con 134.3		
Yarmouth, NS (CYQI)		H-11E, L-32I
Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100')		

MEXICO

FACILITY NAME		CHART & PANEL
Abraham Gonzalez Intl (MMCS)		H-4K, L-6F
Juarez App Con 119.9 Juarez Tower 118.9		
Del Norte Intl (MMAN)		H-7B, L-20G
ATIS 127.55 (1300-0300Z‡)		
Monterrey App 119.75 120.4 Tower 118.6		
Durango Intl (MMDO)		H-7A
ATIS 132.1		
Tower 118.1 Durango Info 122.3		
General Abelardo L Rodriguez Intl (MMTJ)		H-4H, L-4H
ATIS 127.9		
Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Tijuana Clns Del 122.35		
Tijuana Info 132.1		
General Lucio Blanco Intl (MMRX)		H-7B, L-20H
Reynosa App Con 118.8 Reynosa Tower 118.8		
General Mariano Escobedo Intl (MMMY)		H-7B, L-20G
ATIS 127.7		
Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9		
General R Fierro Villalobos Intl (MMCU)		L-6I
ATIS 127.9		
Chihuahua App Con 121.0 Chihuahua Tower 118.4		
General Rodolfo Sanchez Taboada Intl (MMML)		H-4H, L-4J, 5A
ATIS 127.6		
Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3		
General Servando Canales Intl (MMMA)		H-7C, L-21A
Matamoros App Con 118.0 Matamoros Tower 118.0		
Plan De Guadalupe Intl (MMIO)		H-7B
Saltillo App Con 127.4 Saltillo Tower 118.4		
Quetzalcoatl Intl/Nuevo Laredo Intl (MMNL)		H-7B, L-20G
Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3		
Torreón Intl (MMTC)		H-7A
App Con 119.6 Tower 118.5		

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In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

GENERAL INFORMATION

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g.,  
2. Approach lighting systems that do not bear a system identification are indicated with a negative " 1" beside the name

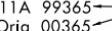
A star (*) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g.,  *

To activate lights use frequency indicated in the communication section of the chart with a  or the appropriate

lighting system identification e.g., UNICOM 122.8   

<u>KEY MIKE</u>	<u>FUNCTION</u>
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

CHART CURRENCY INFORMATION

FAA procedure amendment number  Amdt 11A 99365 Date of latest change
 Orig 00365

The Chart Date identifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

MISCELLANEOUS

- ★ Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- # Indicates control tower temporarily closed UFN.

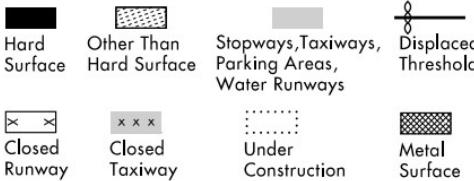
10210

LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

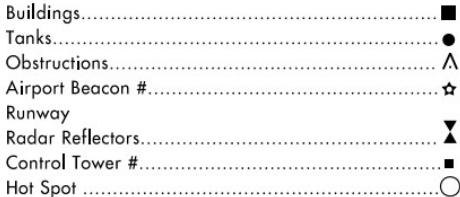


ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.

uni-directional bi-directional Jet Barrier

ARRESTING SYSTEM

REFERENCE FEATURES



When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

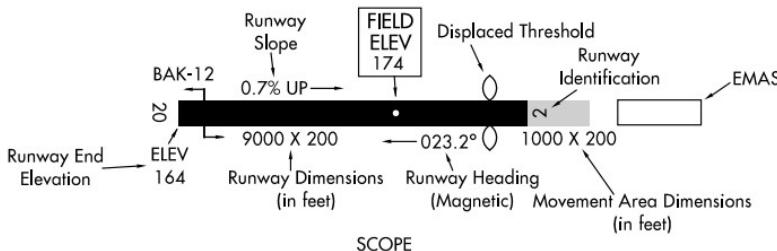
Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A **D** symbol is shown to indicate runway declared distance information available, see appropriate A/FD, Alaska or Pacific Supplement for distance information.

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression.

Refer to the appropriate Supplement/Directory for applicable codes e.g.,

RWY 14-32 PCN 80 F/D/X/U S-75, D-185, 2S-175, 2D-325



Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

LEGEND

AIRPORT DIAGRAMS**HOT SPOTS**

An "Airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT**HOT SPOT****DESCRIPTION****MARYLAND**

BALTIMORE

BALTIMORE/WASHINGTON

INTL THURGOOD MARSHALL (BWI)

HS 1

Uncontrolled stop bar. No crossing allowed.

HS 2

Caution Rwy 10–28 in close proximity to Twy P1 intersection.

HS 3

Twy E clsd and barricaded.

MASSACHUSETTS

BEDFORD

LAURENCE G. HANSCOM FIELD (BED)

HS 1

Pilots become confused with the wide expanse of pavement and convergence of numerous twys.

BOSTON

GENERAL EDWARD LAWRENCE

LOGAN INTL (BOS)

HS 1

Watch for Rwy "04L APCH" when taxiing on Twy B to Rwy 04R and Rwy 09.

HS 2

Maintain vigilance when taxiing outbound on Twy C to Rwy 33L when Rwy 09–27 is active.

HS 3

Maintain vigilance when taxiing on Twy E and Twy K at Rwy 09 when Rwy 04L–22R is active.

HS 4

Maintain vigilance when taxiing inbound on Twy E from Rwy 27 when Rwy 22L is active.

HS 5

Maintain vigilance when taxiing outbound on Twy C and Twy D to Rwy 27 when Rwy 33L is active.

NEW JERSEY

CALDWELL

ESSEX CO (CDW)

HS 1

Pilots taxiing to Rwy 28 northbound on Twy P should exercise caution at intersection of Twy P and Twy N due to close proximity to Rwy 28.

NEW HAMPSHIRE

LEBANON

LEBANON MUNI (LEB)

HS 1

Rwy hold position marking for Rwy 25 on Twy B is further down the twy than most pilots would expect. When taxiing to Rwy 25 on Twy B the hold line will appear before you expect it.

HS 2

North Ramp and Twy B between Twy B1 and Twy B2 area not visible from the twr.

HS 3

Acft routinely back taxi on Rwy 18–36.

MANCHESTER

MANCHESTER (MHT)

HS 1

Maintain vigilance approaching the rwy holding position markings. Anticipate the Rwy 17 hold line upon crossing Rwy 24 northbound on Twy H.

HS 2

Maintain vigilance when taxiing to Rwy 35 on Twy A. Rwy holding position markings located on the edge of Twy A at Twy P and Twy U.

NEW YORK

NEW YORK LA GUARDIA (LGA)	HS 1	Complex intersections at rwys and Twy G, Twy P, Twy R, Twy S.
ROCHESTER GREATER ROCHESTER INTL (ROC)	HS 2	Acft exiting Rwy 04 at Twy Q sometimes stop without clearing the rwy.
	HS 1	Be alert during ldg/tkf Rwy 25 and Rwy 28 thlds in close proximity to each other.
	HS 2	Do not cross Rwy 10–28 without specific ATC clearance.

PENNSYLVANIA

HARRISBURG CAPITAL CITY (CXY)	HS 1	Rwy 26 LAHSO pavement marking is difficult to see in late afternoon due to sun.
	HS 2	Rwy 08 ILS Critical Area hold line pavement marking is NSTD.
	HS 3	Twy C at Rwy 30 – Entrance to Twy B is difficult to see from Twy C due to large pavement area.
PHILADELPHIA PHILADELPHIA INTL (PHL)	HS 1	Acft taxiing on Twy D must remain alert to not enter Rwy 08–26 without proper clearance.
	HS 2	Acft exiting the ramp via Twy H must remain alert to not mistake Rwy 17–35 for Twy E.
	HS 3	Tfc taxiing south on Twy Y must be alert to not miss the turn at Twy S and enter onto Rwy 09R–27L.

RHODE ISLAND

PROVIDENCE THEODORE FRANCIS GREEN STATE (PVD)	HS 1	Maintain vigilance at Twy M and Twy C due to vast amount of pavement and multiple rwy hold lines in close proximity of rwy.
	HS 2	Intersection of Rwy 16–34, Twy V, Twy N, and Twy T – complex intersection with a convergence of numerous twys with Rwy 16–34.
	HS 3	Twy M at the intersection of Twy B use extra vigilance due to vast amount of pavement and multiple hold lines in close proximity of rwy.

VERMONT

BURLINGTON BURLINGTON INTL (BTW)	HS 1	Wrong rwy departure risk. Pilots instructed to depart Rwy 19 mistakenly depart wrong rwy–Rwy 15.
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10210

AIRPORT DIAGRAM

AL-10 (FAA)

ALBANY INTL (ALB)
ALBANY, NEW YORK

ATIS
120.45
ALBANY TOWER
119.5 257.8
GND CON
121.7 348.6
CLNC DEL 127.5
D

42°45.5'N

ELEV
280.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

61

A

B

P

C

A

E

F

A

M

M

CARGO
RAMP
CONTROL
TOWER
399

LAHSO

LAHSO

LAHSO

H

Z

C

H

28

ELEV
276

102.1°

8500 X 150

012.1°

ELEV
284

73°48.5'W

73°48.0'W

73°47.5'W

42°44.0'N

42°44.5'N

42°45.0'N

42°45.5'N

42°46.0'N

42°46.5'N

42°47.0'N

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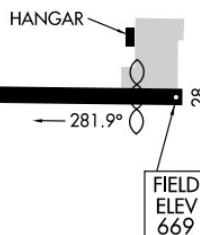
10210

AIRPORT DIAGRAM

AL-6495 (FAA)

ALBION/PINE HILL (9G6)
ALBION, NEW YORKCTAF/UNICOM
123.0

43°10.5'N

ELEV
653RWY 10-28
S-12

43°10.0'N

078°16.5'W

078°16.0'W

AIRPORT DIAGRAM
10210ALBION, NEW YORK
ALBION/PINE HILL (9G6)

10210

AIRPORT DIAGRAM

AL-15 (FAA)

ALLENTOWN / LEHIGH VALLEY INTL (ABE)
ALLENTOWN, PENNSYLVANIA

ATIS
126.975
ALLENTOWN TOWER
120.5 257.95
GND CON
121.9 257.95
CLNC DEL
124.05 257.95

DA
490±

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E

AIRPORT
MAINTENANCE

ILS HOLD LINE

B-7

135.3°

B-6

B-5

B

C

FIRE STATION

CONTROL TOWER

535

HANGARS

HANGAR 5

HOLD LINES

ELEV
381

C

C

F

F

F

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HANGAR 3
AND RAMP
(PRIVATE)ELEV
381HANGAR 2
AND RAMP
(PRIVATE)

TERMINAL

40°39.0'N

7600 X 150

5797 X 150

RWY 06-24

S-75, D-209, 2S-175, 2D-370

RWY 13-31

S-75, D-161, 2S-175, 2D-290

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

40°38.5'N

75°27.0'W

75°26.5'W

75°26.0'W

AIRPORT DIAGRAM

10210

ALLENTOWN, PENNSYLVANIA
ALLENTOWN / LEHIGH VALLEY INTL (ABE)

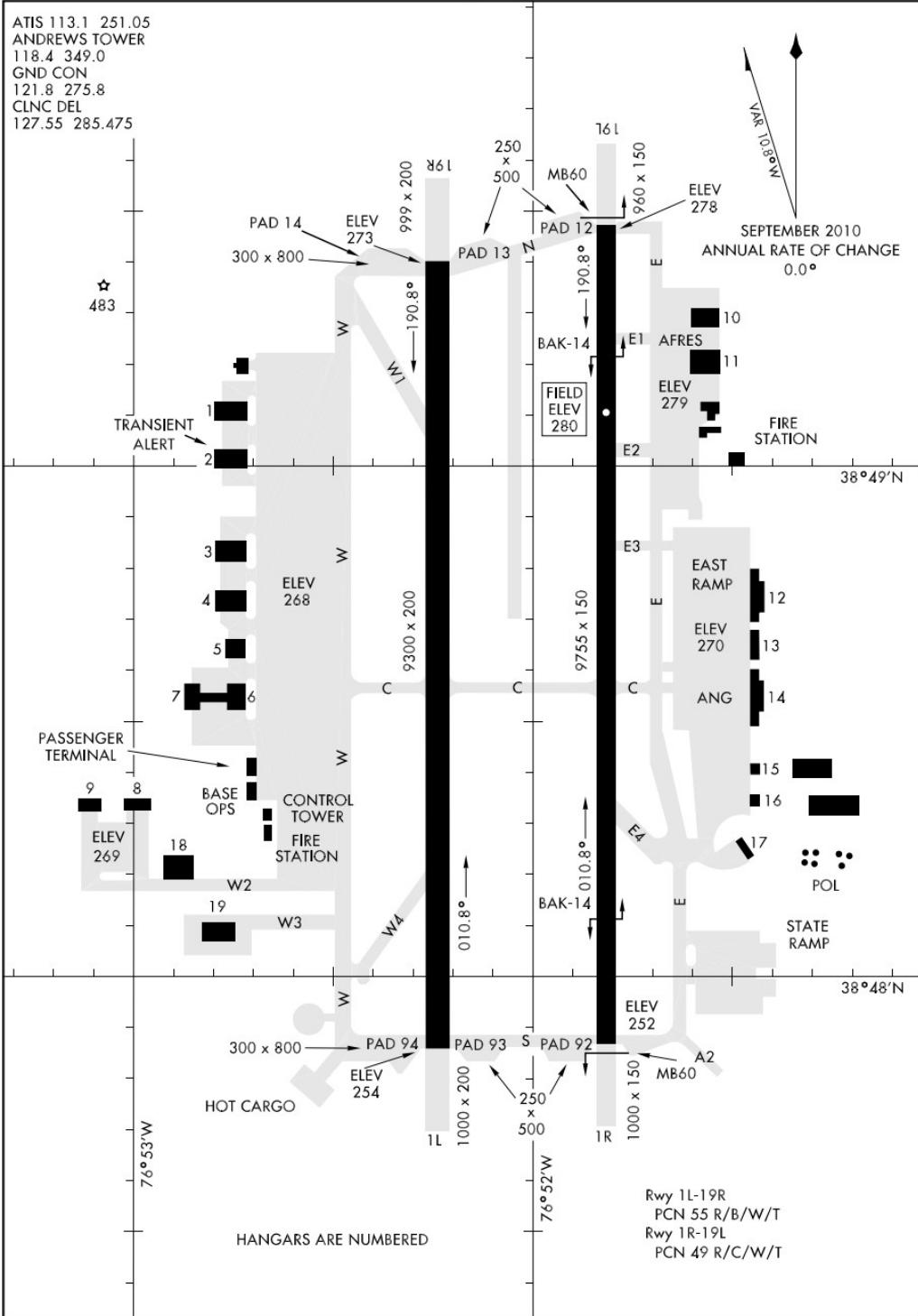
10266

AIRPORT DIAGRAM

AFD-561 [USAF]

ANDREWS AFB (KADW)
CAMP SPRINGS, MARYLAND

ATIS 113.1 251.05
 ANDREWS TOWER
 118.4 349.0
 GND CON
 121.8 275.8
 CLNC DEL
 127.55 285.475



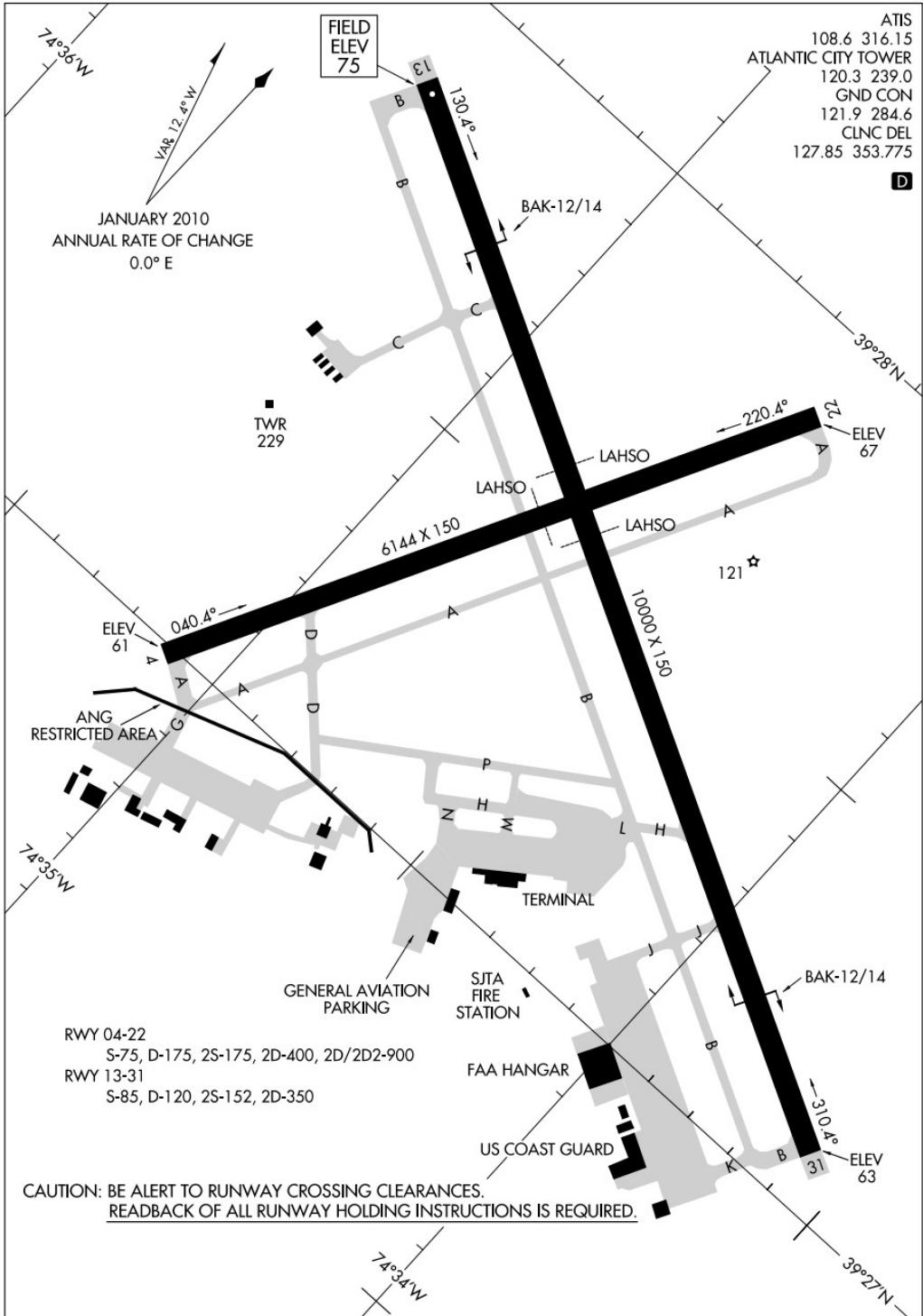
AIRPORT DIAGRAM

CAMP SPRINGS, MARYLAND
ANDREWS AFB (KADW)

10210

AIRPORT DIAGRAM

AL-669 (FAA)

ATLANTIC CITY INT'L (ACY)
ATLANTIC CITY, NEW JERSEYAIRPORT DIAGRAM
10210ATLANTIC CITY, NEW JERSEY
ATLANTIC CITY INT'L (ACY)

10266

AIRPORT DIAGRAM

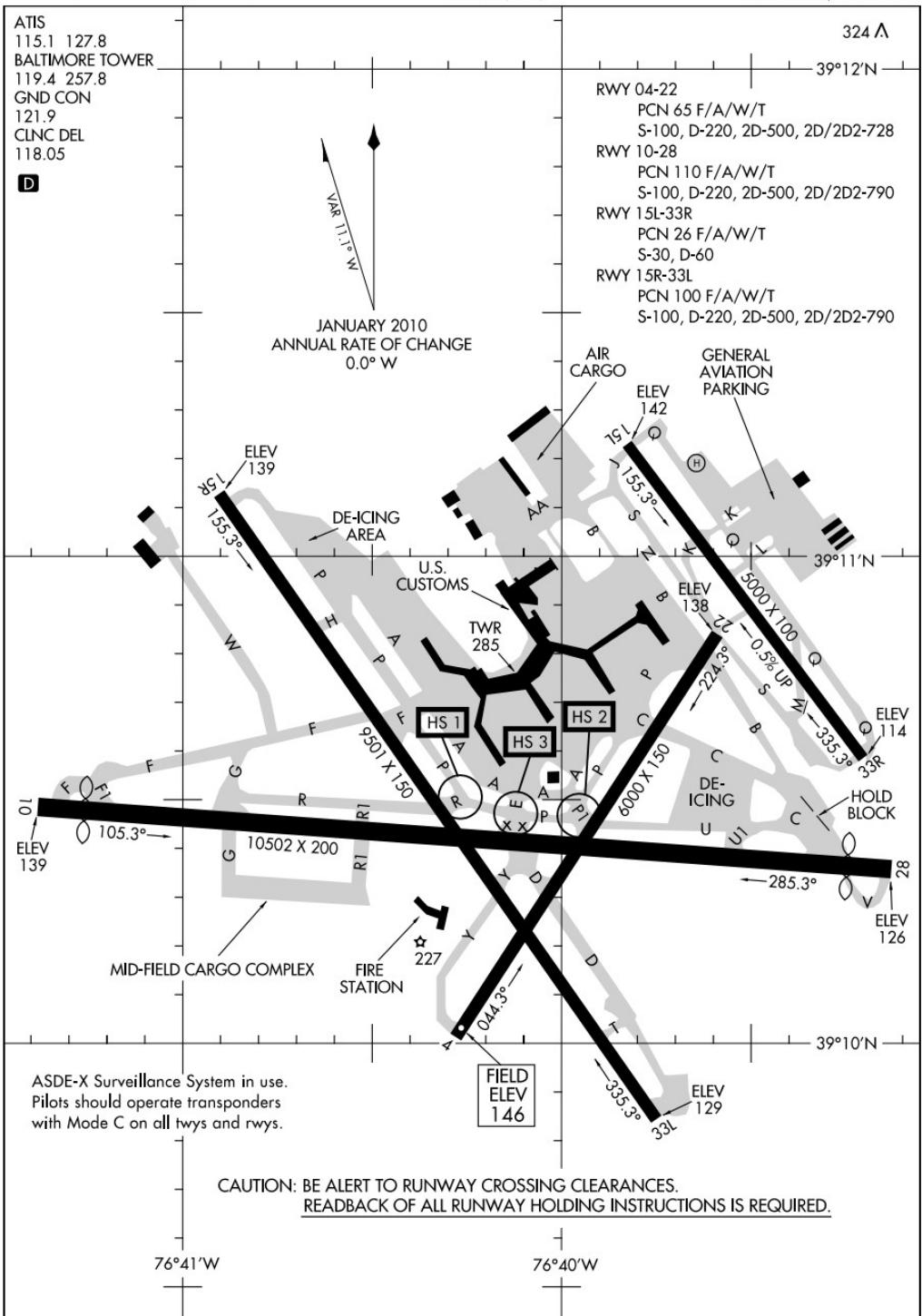
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

AL-804 (FAA)

BALTIMORE, MARYLAND

ATIS
115.1 127.8
BALTIMORE TOWER
119.4 257.8
GND CON
121.9
CLNC DEL
118.05

D



AIRPORT DIAGRAM

10266

BALTIMORE, MARYLAND

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

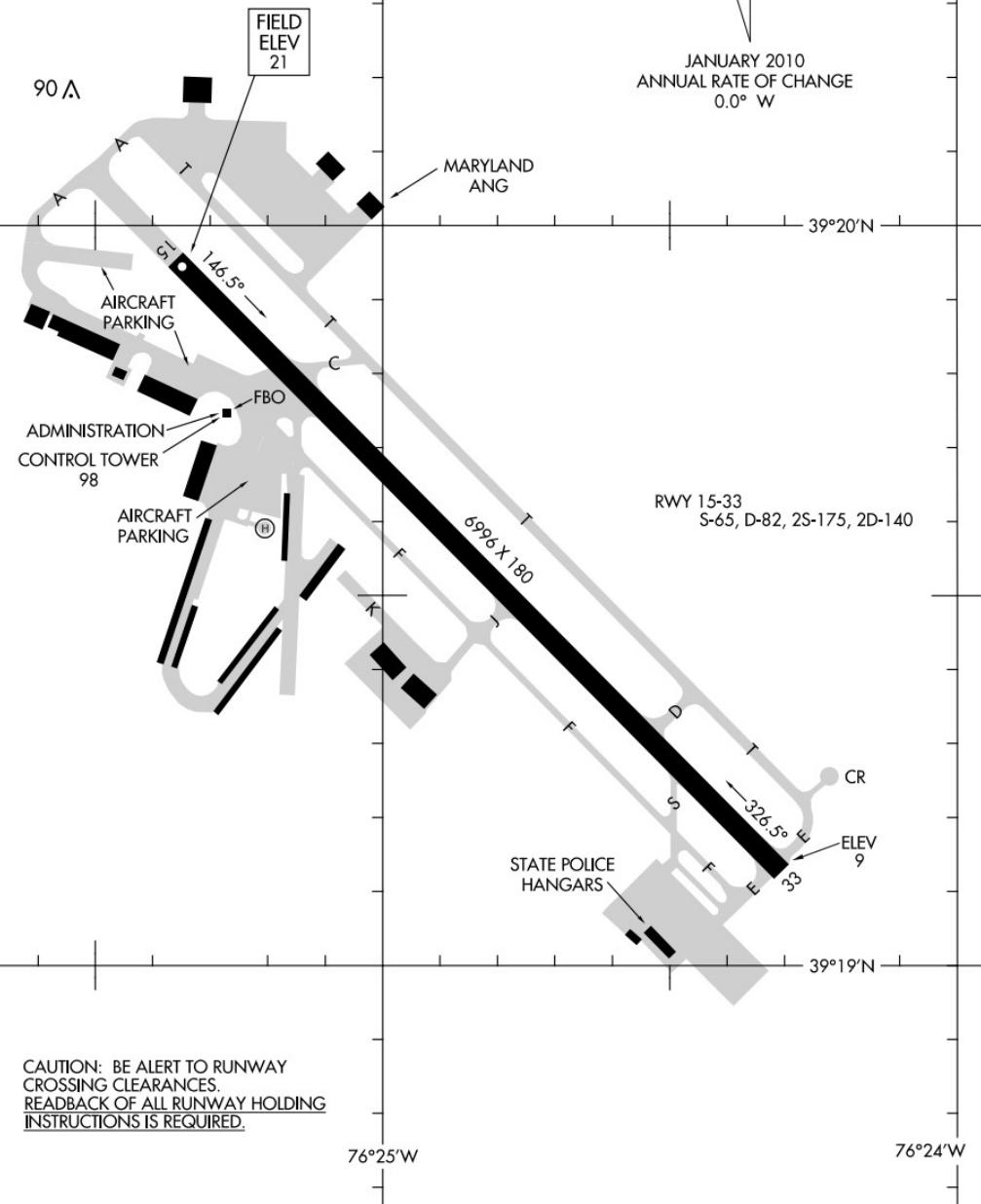
10210

AIRPORT DIAGRAM

AI-5222 (FAA)

BALTIMORE/MARTIN STATE (MTN)
BALTIMORE, MARYLAND

ATIS
124.925
MARTIN TOWER *
121.3 297.2
GND CON
121.8 253.4
CLNC DEL
121.8



AIRPORT DIAGRAM
10210

BALTIMORE, MARYLAND
BALTIMORE/MARTIN STATE (MTN)

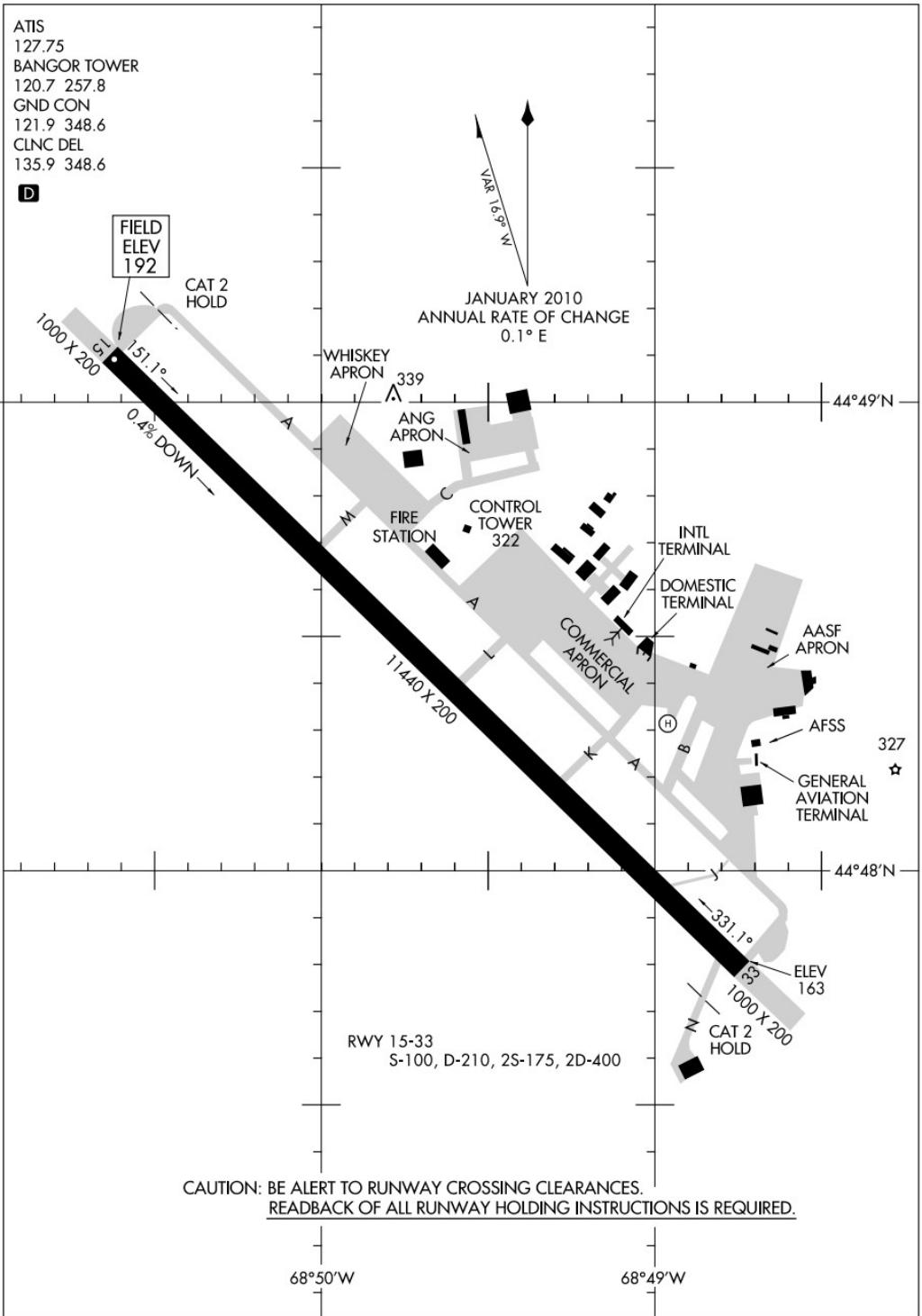
10210

AIRPORT DIAGRAM

AL-39 (FAA)

BANGOR INTL (BGR)
BANGOR, MAINE

ATIS
127.75
BANGOR TOWER
120.7 257.8
GND CON
121.9 348.6
CLNC DEL
135.9 348.6

D

AIRPORT DIAGRAM

10210

BANGOR, MAINE
BANGOR INTL (BGR)

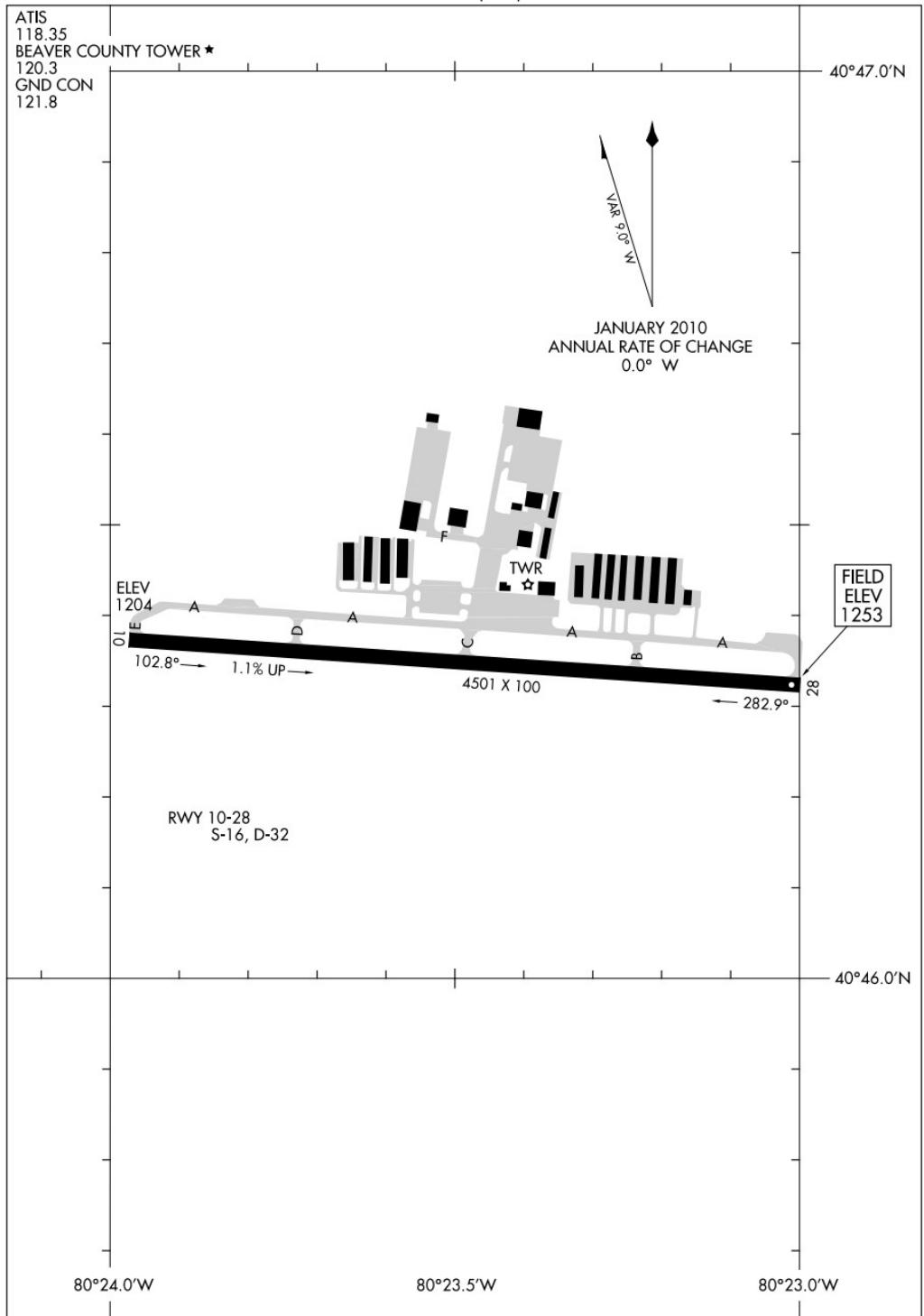
552

AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

AL-5206 (FAA)

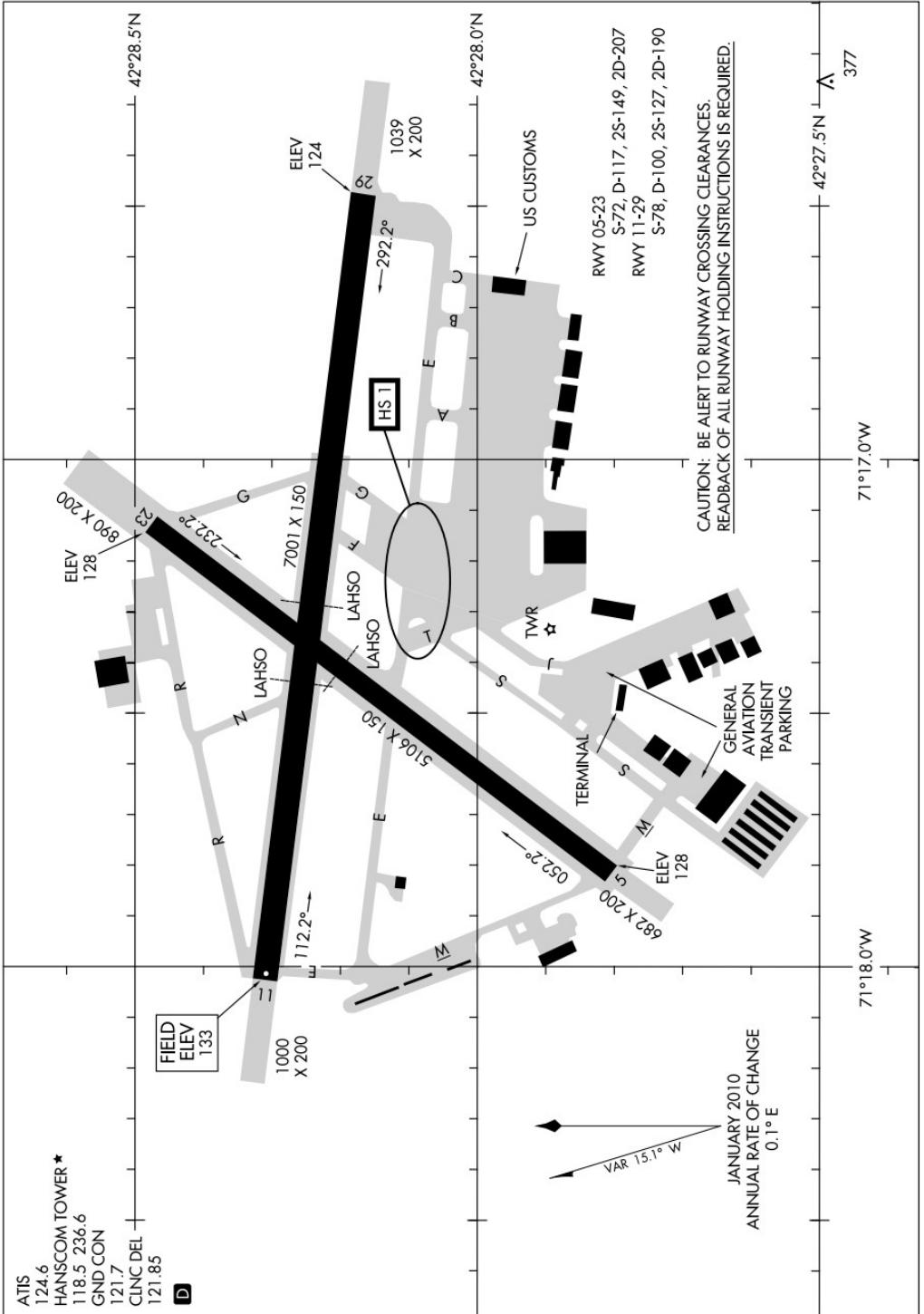
BEAVER FALLS/ BEAVER COUNTY (BVI)
BEAVER FALLS, PENNSYLVANIAAIRPORT DIAGRAM
10210BEAVER FALLS, PENNSYLVANIA
BEAVER FALLS/BEAVER COUNTY (BVI)

10266

AIRPORT DIAGRAM

BEDFORD / LAURENCE G. HANSCOM FIELD (BED)
AL-626 (FAA)

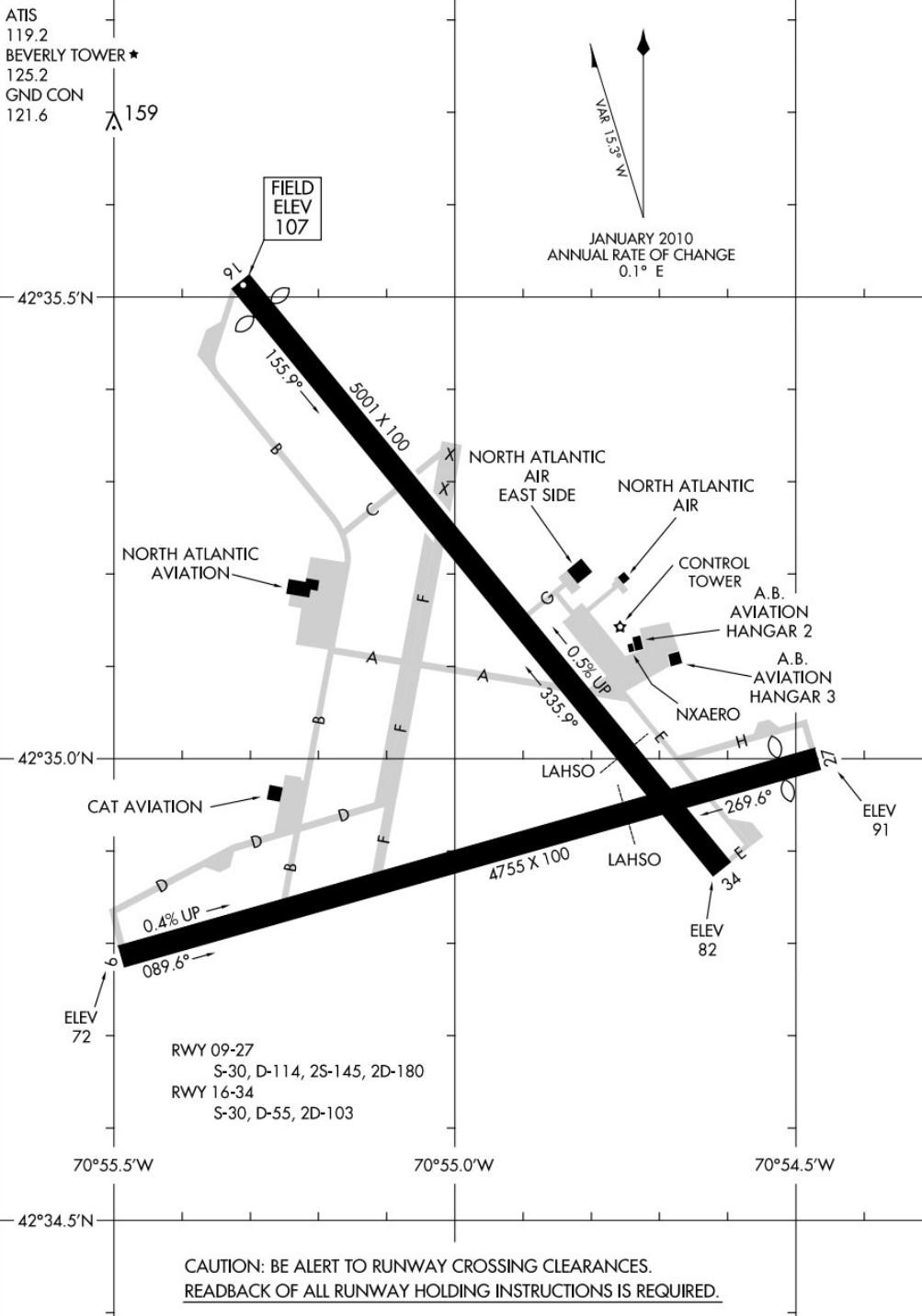
BEDFORD, MASSACHUSETTS

AIRPORT DIAGRAM
10266BEDFORD, MASSACHUSETTS
BEDFORD / LAURENCE G. HANSCOM FIELD (BED)

10210

AIRPORT DIAGRAM

AL-5039 (FAA)

BEVERLY MUNI (BVV)
BEVERLY, MASSACHUSETTS

AIRPORT DIAGRAM

10210

BEVERLY, MASSACHUSETTS
BEVERLY MUNI (BVV)

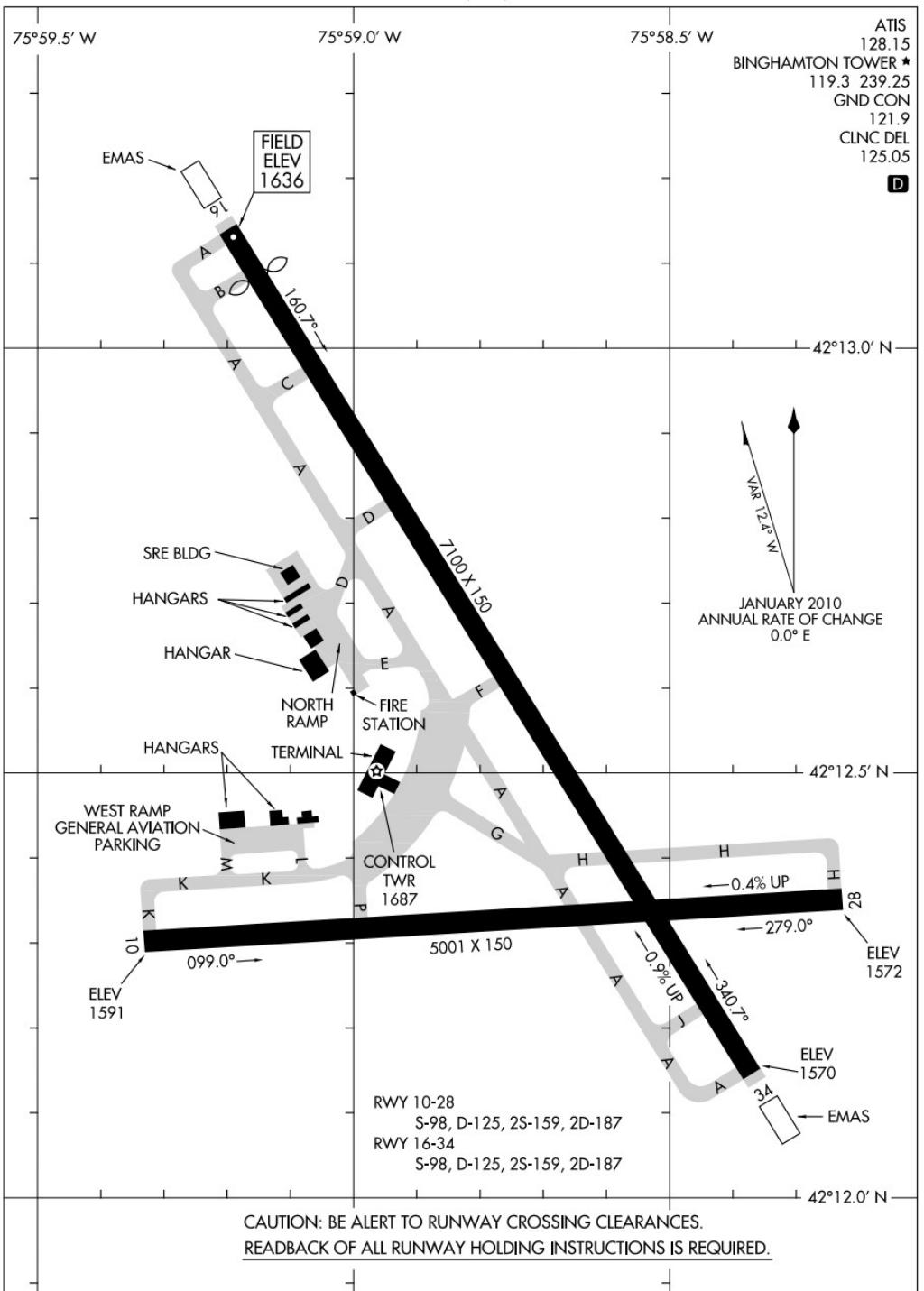
10210

AIRPORT DIAGRAM

BINGHAMTON/GREATER BINGHAMTON/EDWIN A. LINK FIELD (BGM)

AL-20 (FAA)

BINGHAMTON, NEW YORK



AIRPORT DIAGRAM

10210

BINGHAMTON, NEW YORK

BINGHAMTON/GREATER BINGHAMTON/EDWIN A. LINK FIELD (BGM)

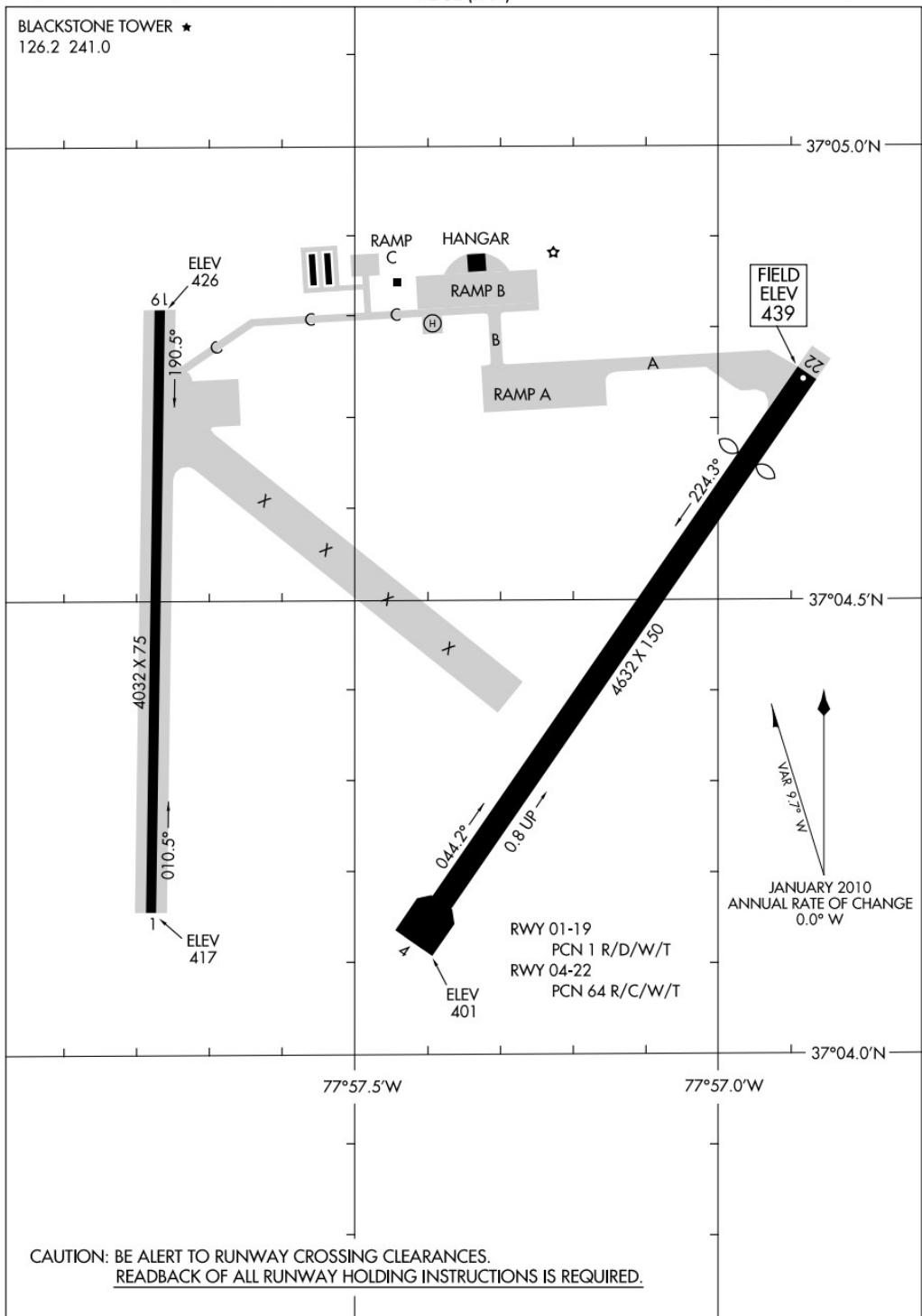
NE. 23 SEP 2010 to 18 NOV 2010

10210

AIRPORT DIAGRAM

BLACKSTONE/ALLEN C. PERKINSON/BAAF (BKT)
AL-52 (FAA)

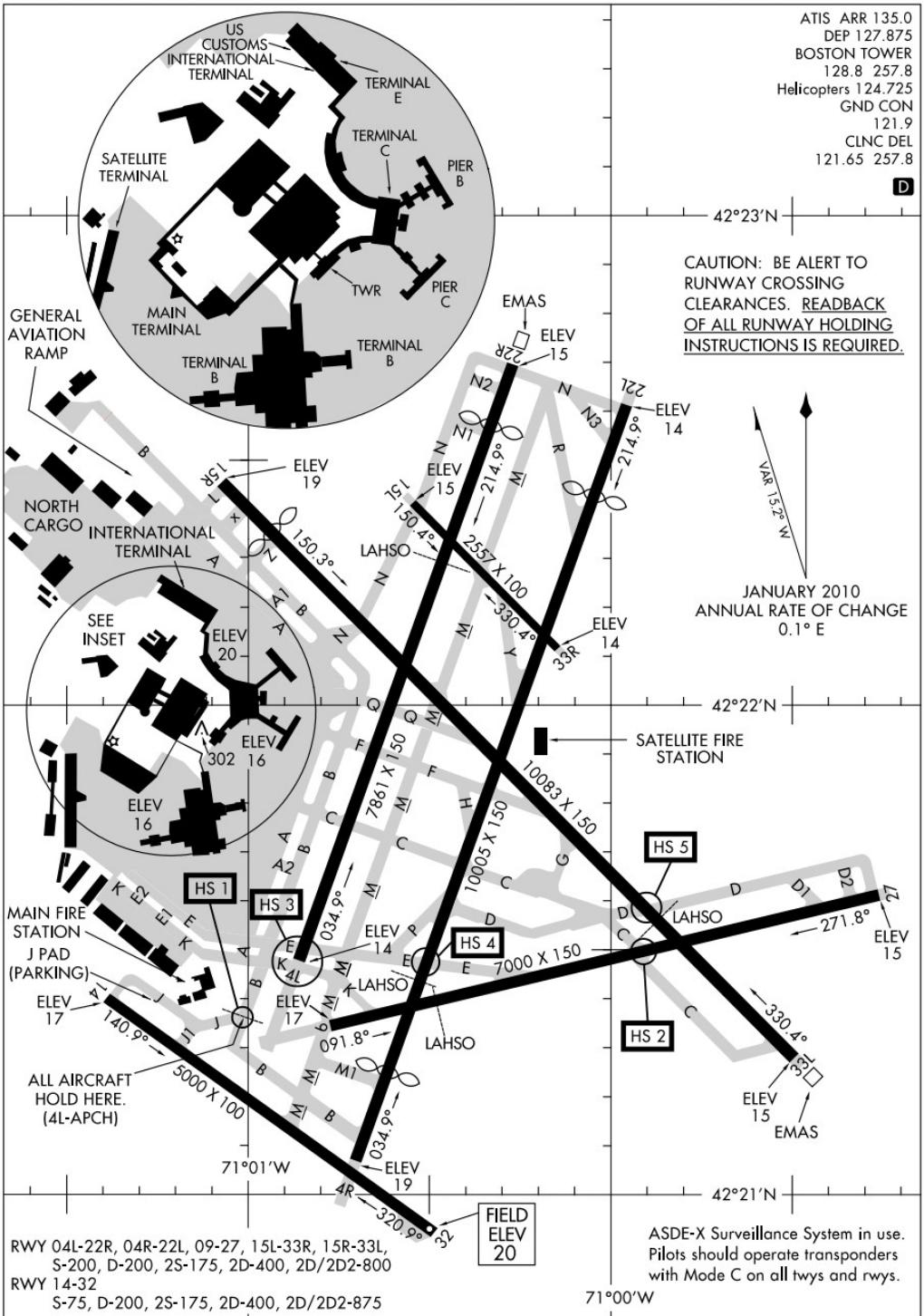
BLACKSTONE, VIRGINIA

BLACKSTONE TOWER ★
126.2 241.010210
AIRPORT DIAGRAMBLACKSTONE, VIRGINIA
BLACKSTONE/ALLEN C. PERKINSON/BAAF (BKT)

10266

AIRPORT DIAGRAM

BOSTON / GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)
AL-58 (FAA) BOSTON, MASSACHUSETTS



AIRPORT DIAGRAM

BOSTON, MASSACHUSETTS

BOSTON / GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

10266

NE, 23 SEP 2010 to 18 NOV 2010

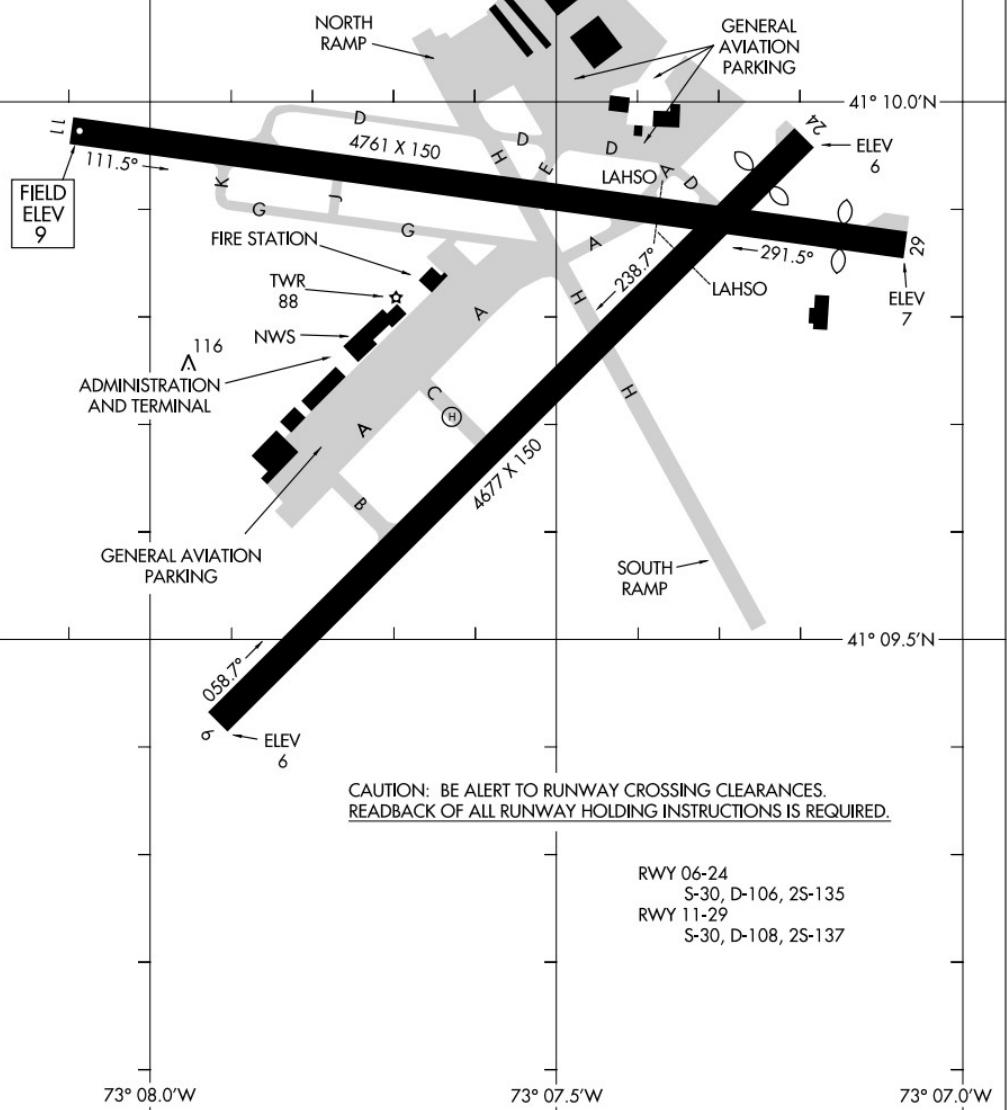
AIRPORT DIAGRAM

AL-621 (FAA)

BRIDGEPORT / IGOR I. SIKORSKY MEMORIAL (BDR)
BRIDGEPORT, CONNECTICUT

ATIS
119.15
BRIDGEPORT TOWER ★
120.9 257.8
GND CON
121.75 257.8
CLNC DEL
121.75

D

AIRPORT DIAGRAM
10210BRIDGEPORT, CONNECTICUT
BRIDGEPORT / IGOR I. SIKORSKY MEMORIAL (BDR)

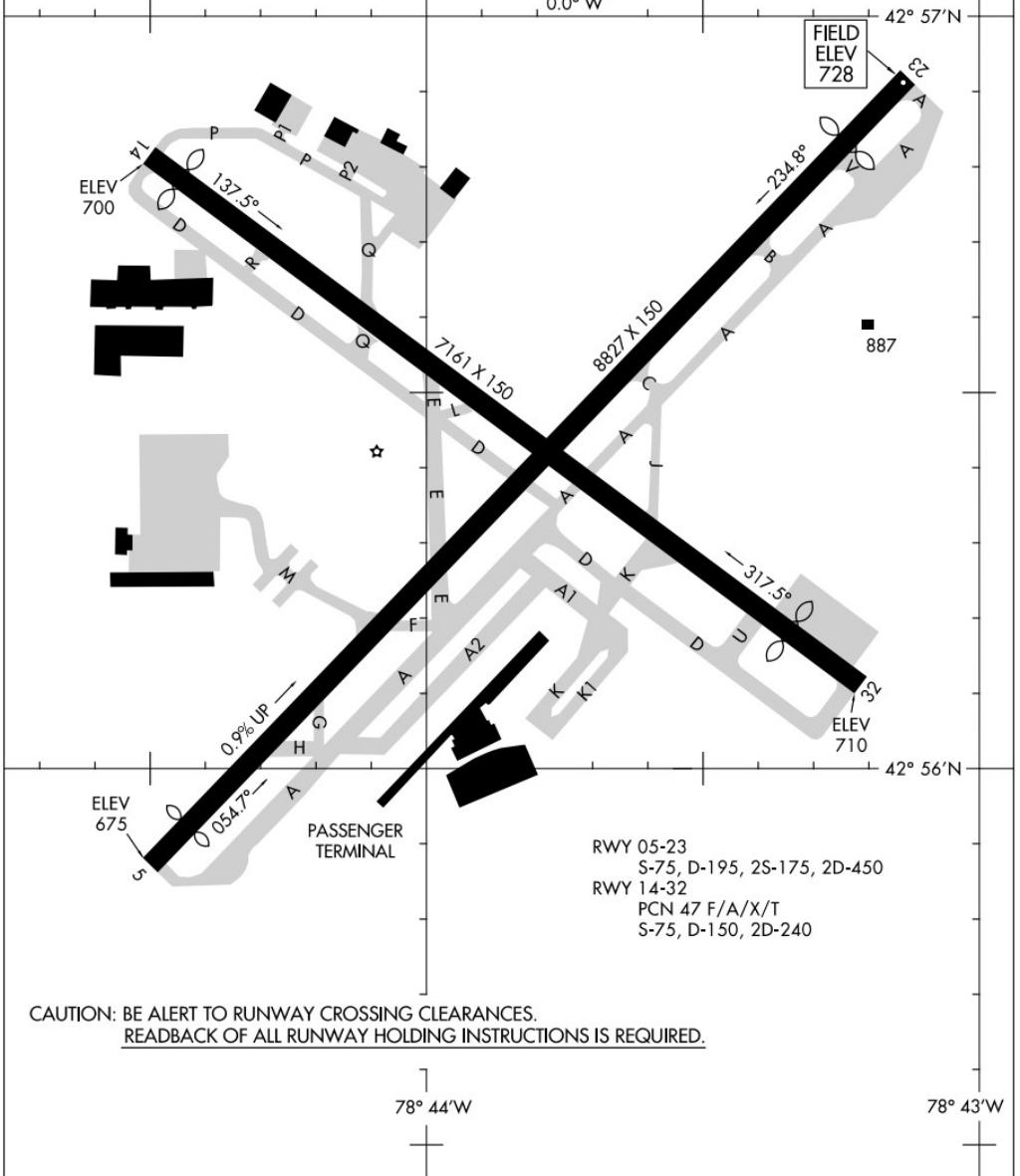
10210

AIRPORT DIAGRAM

AL-65 (FAA)

BUFFALO NIAGARA INTL(BUF)
BUFFALO, NEW YORK

ATIS
135.35
BUFFALO TOWER
120.5 257.8
GND CON
133.2 257.8
CLNC DEL
124.7 257.8

D

AIRPORT DIAGRAM

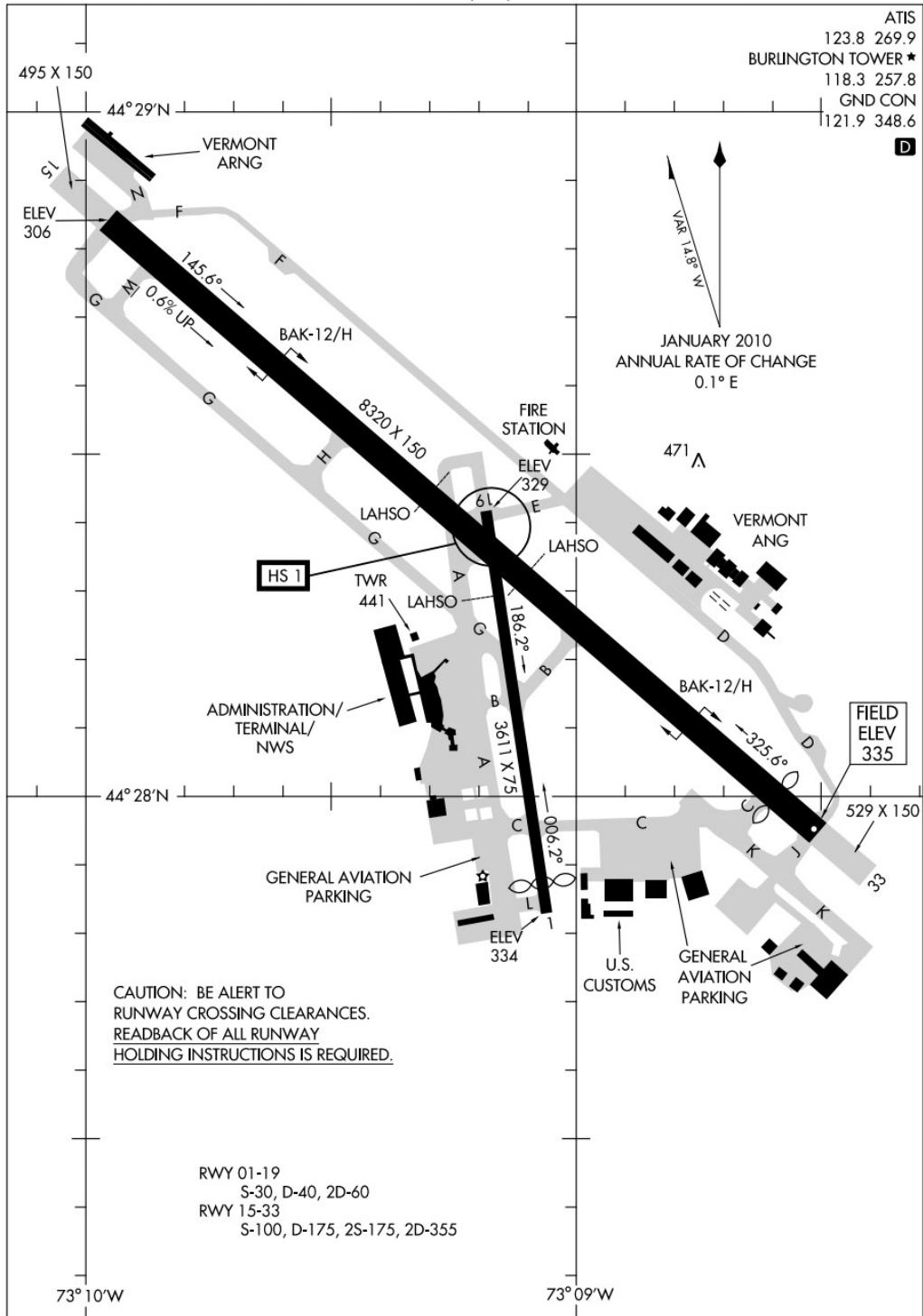
10210

BUFFALO, NEW YORK
BUFFALO NIAGARA INTL(BUF)

10266

AIRPORT DIAGRAM

AL-70 (FAA)

BURLINGTON INTL (BTV)
BURLINGTON, VERMONT

AIRPORT DIAGRAM

10266

BURLINGTON, VERMONT
BURLINGTON INTL (BTV)

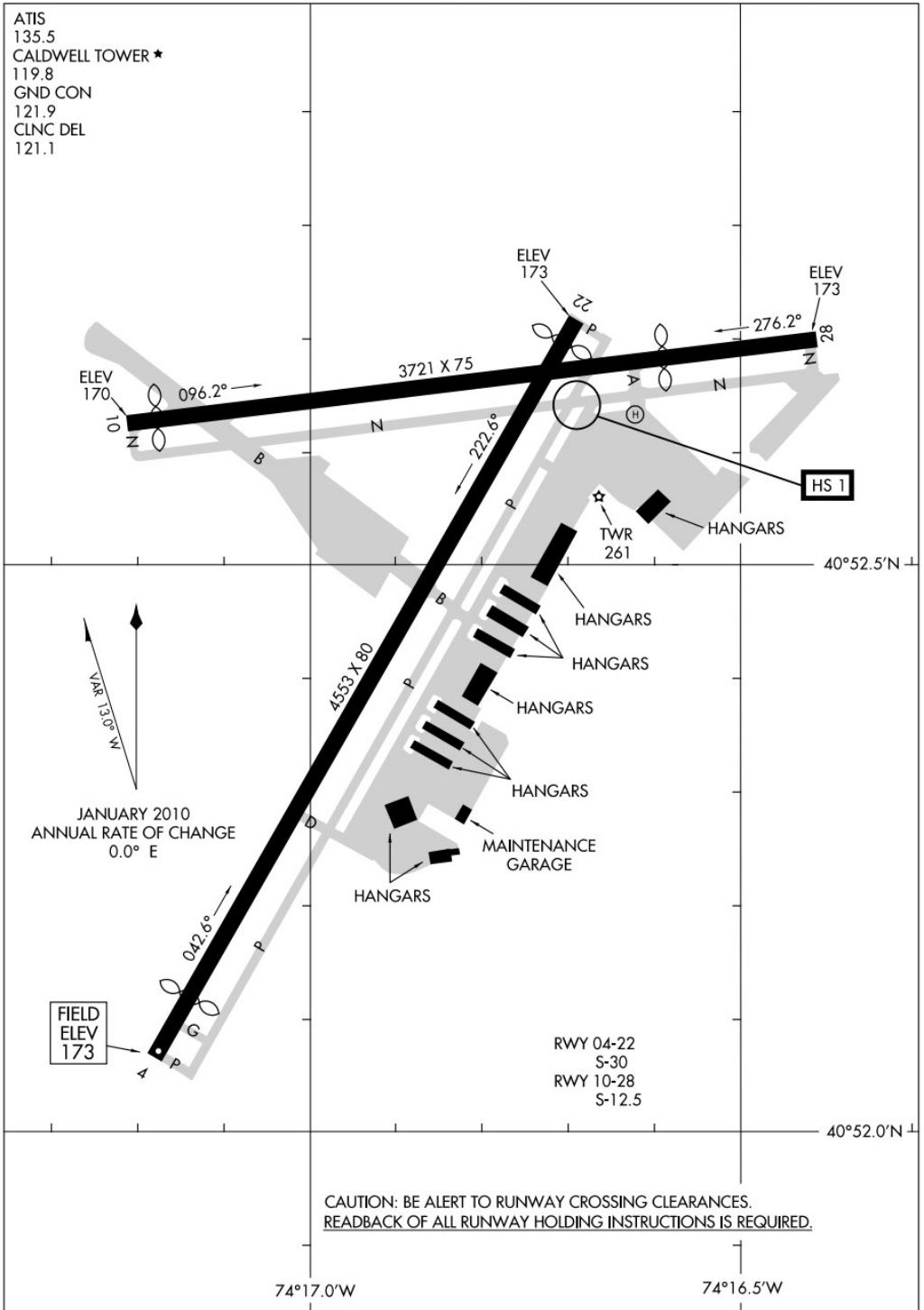
10266

AIRPORT DIAGRAM

AL-5275 (FAA)

Caldwell/ Essex County (CDW)
Caldwell, New Jersey

ATIS
135.5
CALDWELL TOWER ★
119.8
GND CON
121.9
CLNC DEL
121.1



AIRPORT DIAGRAM

10266

Caldwell, New Jersey
Caldwell/ Essex County (CDW)

10266

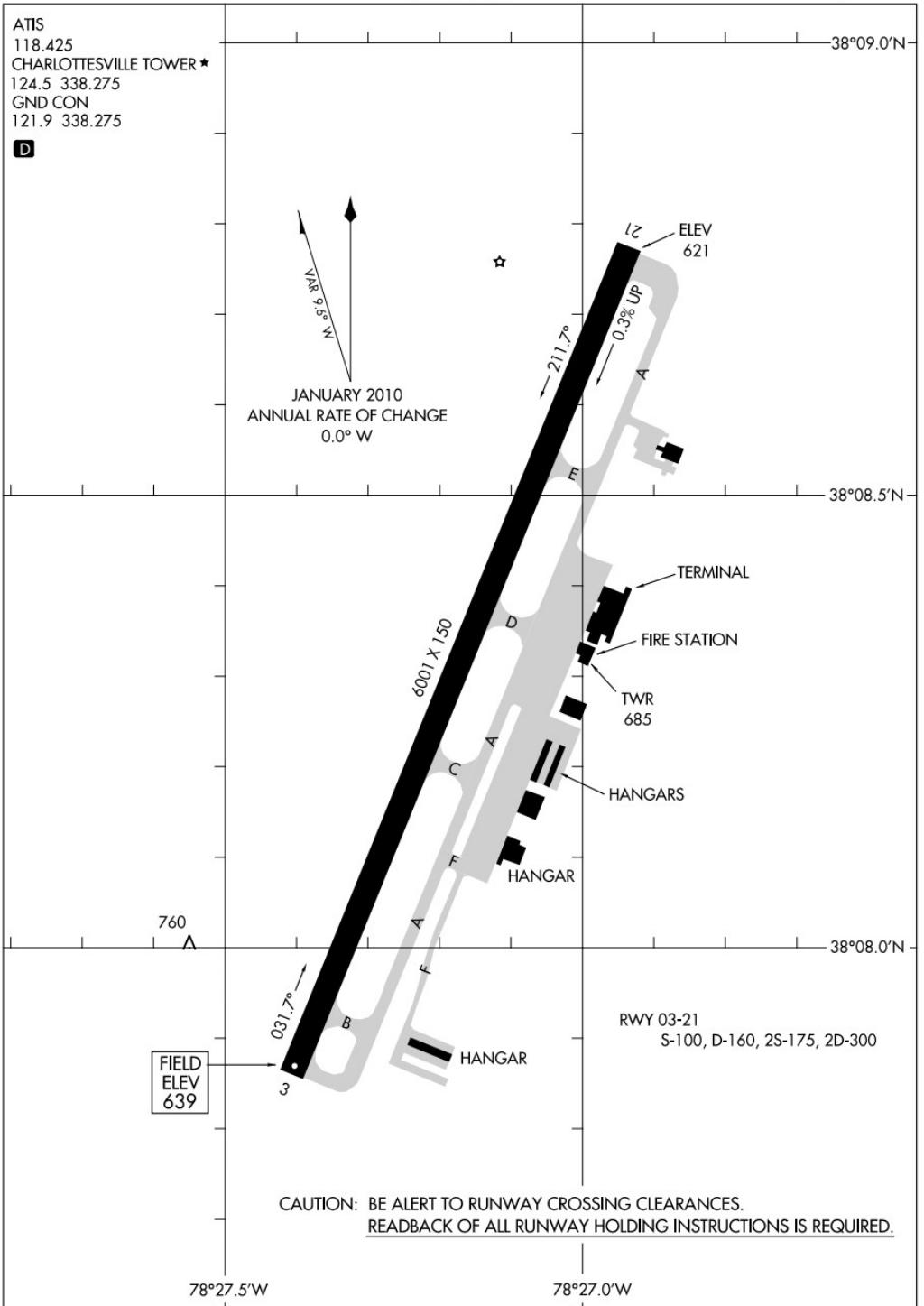
AIRPORT DIAGRAM

AL-765 (FAA)

CHARLOTTESVILLE-ALBERMARLE (CHO)
CHARLOTTESVILLE, VIRGINIA

ATIS
118.425
CHARLOTTESVILLE TOWER ★
124.5 338.275
GND CON
121.9 338.275

D



AIRPORT DIAGRAM

10266

CHARLOTTESVILLE, VIRGINIA

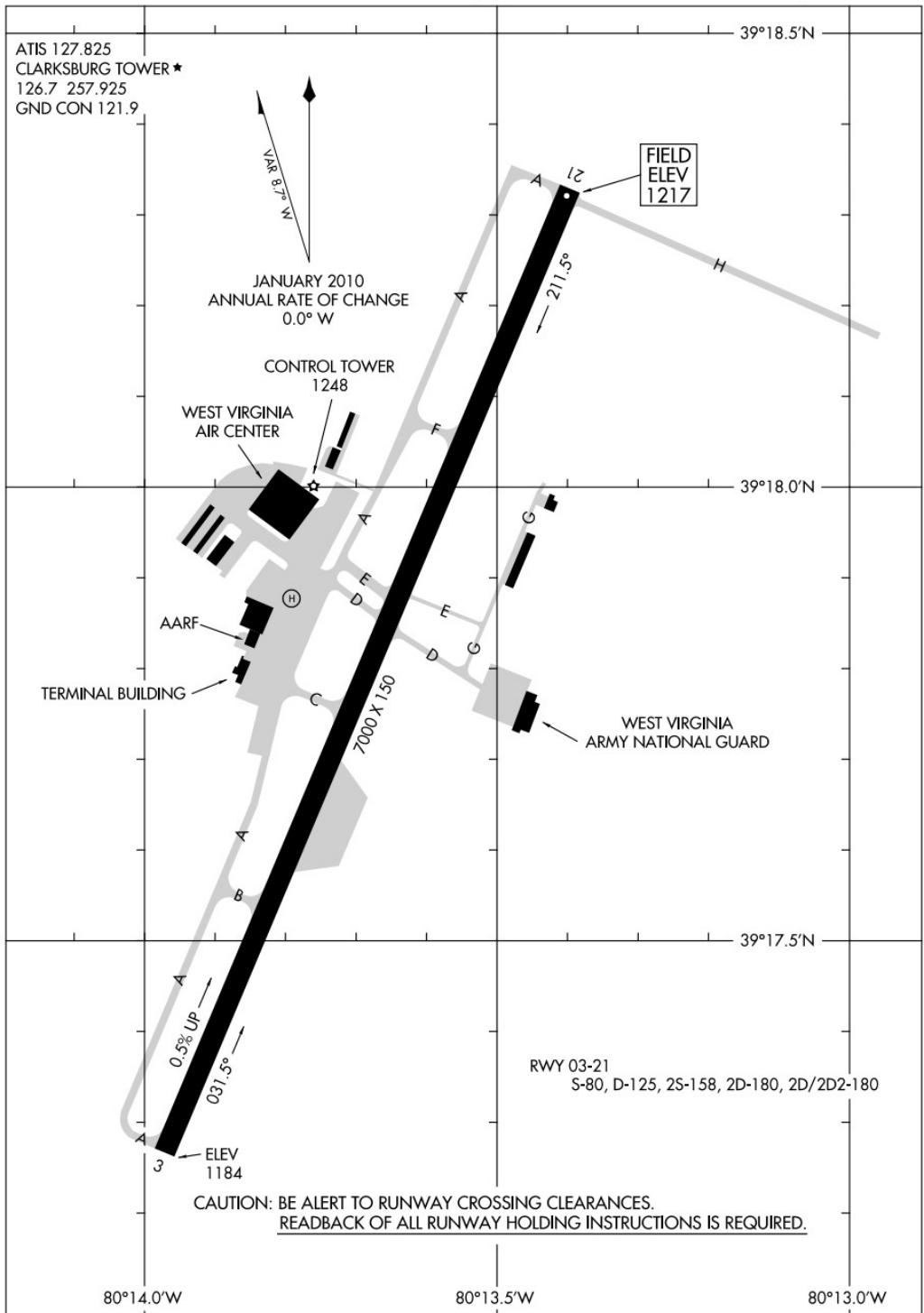
CHARLOTTESVILLE-ALBERMARLE (CHO)

10210

AIRPORT DIAGRAM

CLARKSBURG / NORTH CENTRAL WEST VIRGINIA (CKB)
AL-616 (FAA)

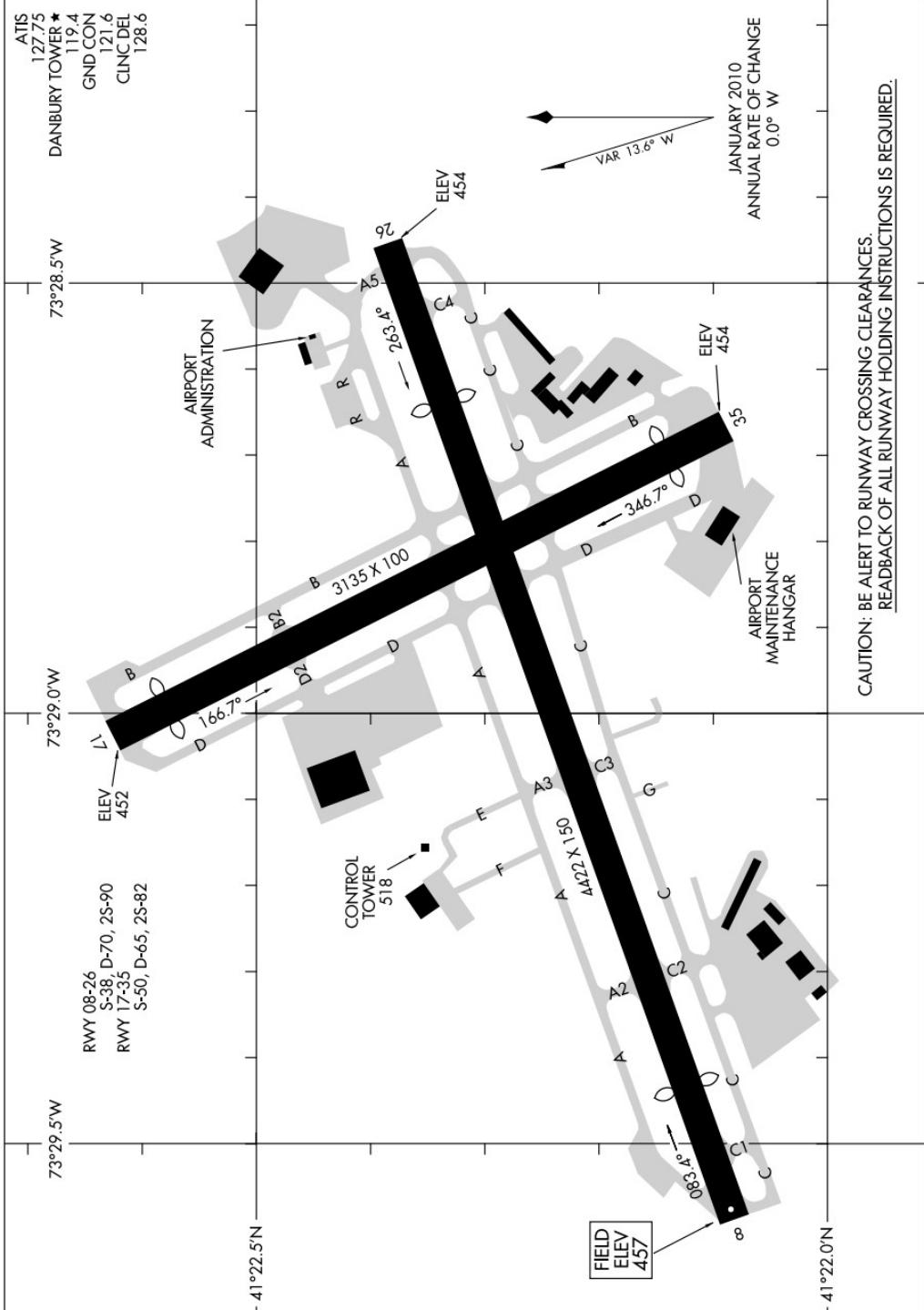
CLARKSBURG, WEST VIRGINIA

AIRPORT DIAGRAM
10210CLARKSBURG, WEST VIRGINIA
CLARKSBURG / NORTH CENTRAL WEST VIRGINIA (CKB)

10210

AIRPORT DIAGRAM

AL-5272 (FAA)

DANBURY MUNI (DXR)
DANBURY, CONNECTICUTAIRPORT DIAGRAM
10210DANBURY, CONNECTICUT
DANBURY MUNI (DXR)

NE. 23 SEP 2010 to 18 NOV 2010

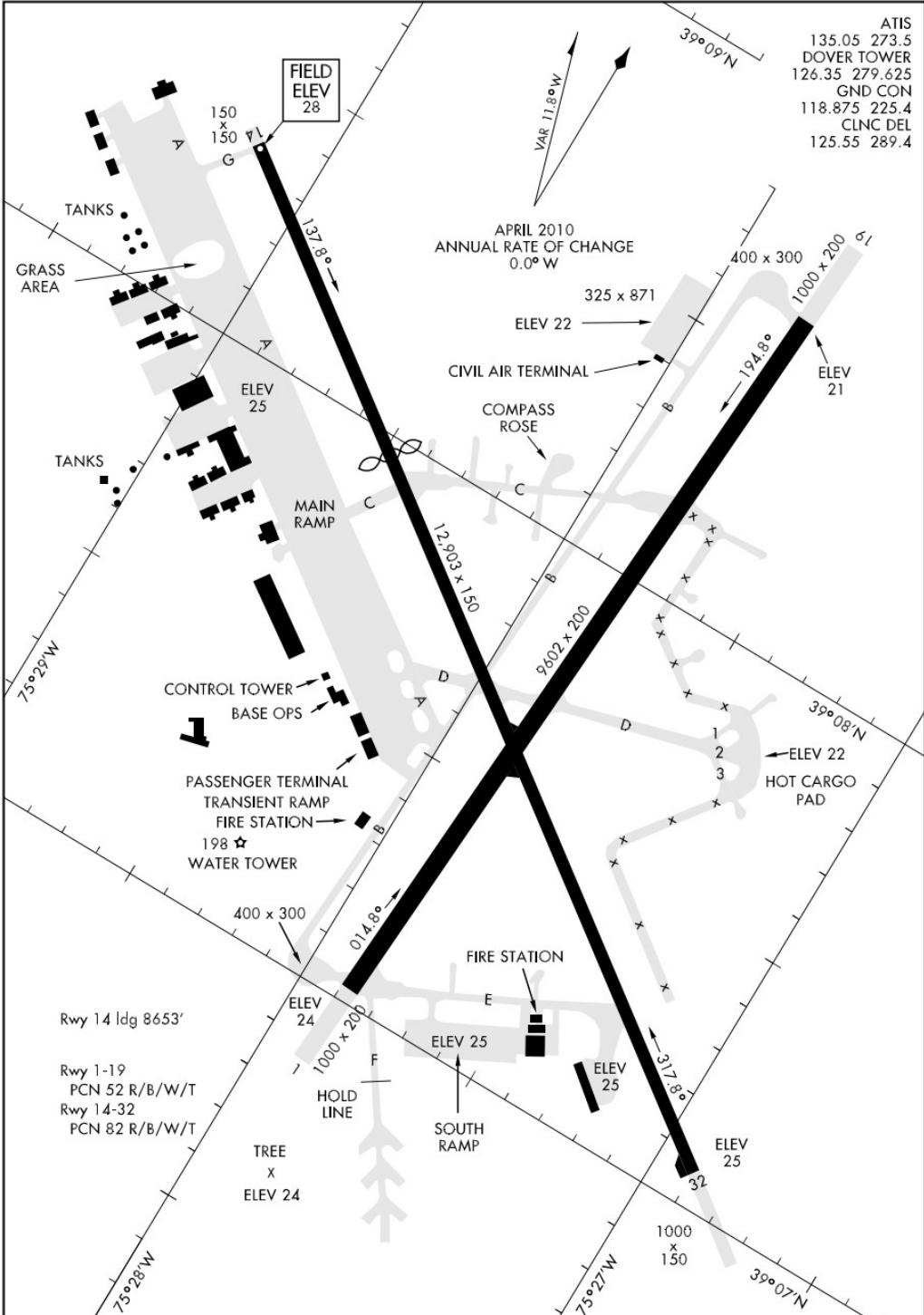
10098

AIRPORT DIAGRAM

AFD-562 [USAF]

DOVER AFB (KDOV)

DOVER, DELAWARE



AIRPORT DIAGRAM

DOVER, DELAWARE
DOVER AFB (KDOV)

10210

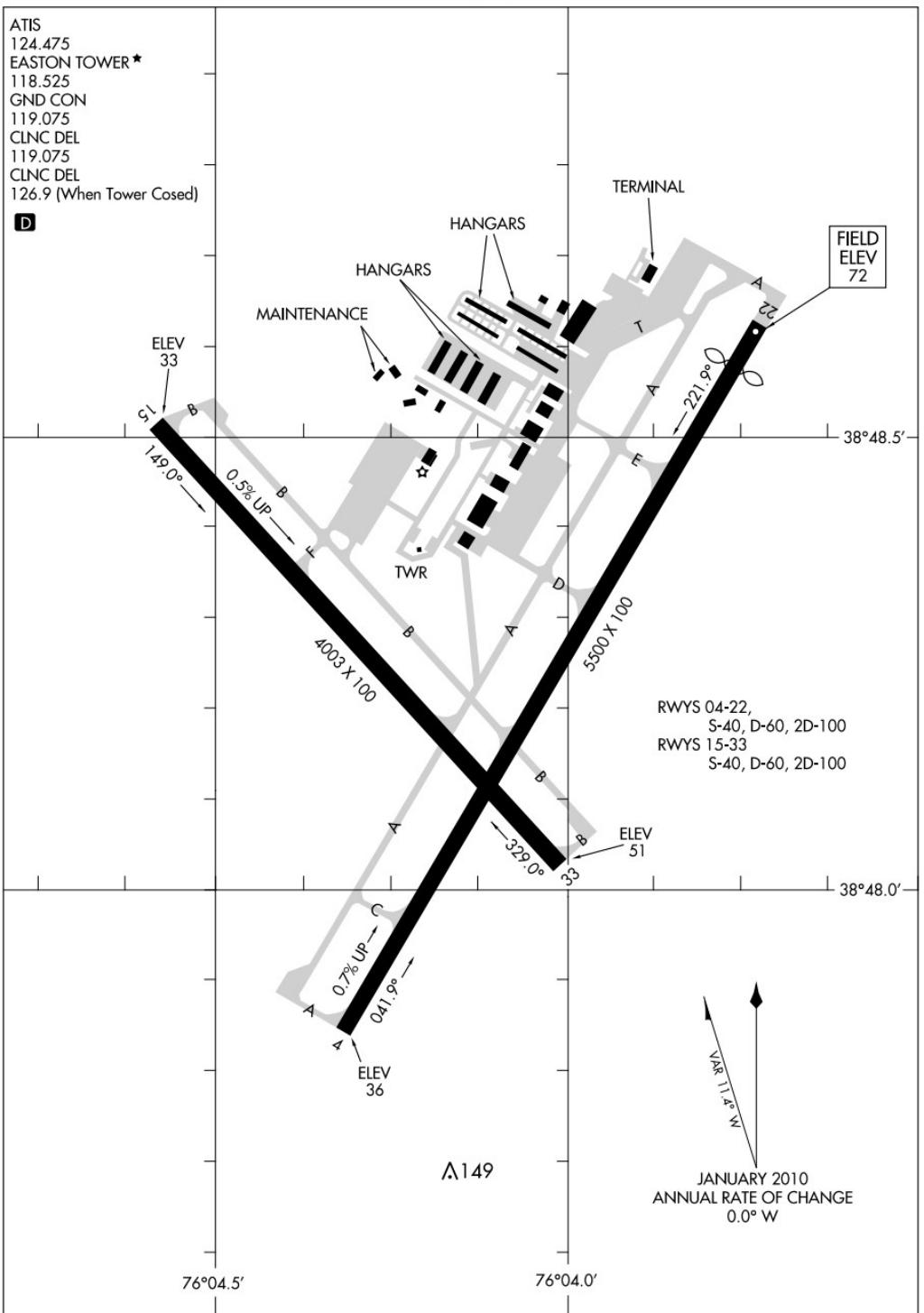
AIRPORT DIAGRAM

AL-5596 (FAA)

EASTON/NEWNAM FIELD (ESN)
EASTON, MARYLAND

ATIS
124.475
EASTON TOWER *
118.525
GND CON
119.075
CLNC DEL
119.075
CLNC DEL
126.9 (When Tower Closed)

D



AIRPORT DIAGRAM

10210

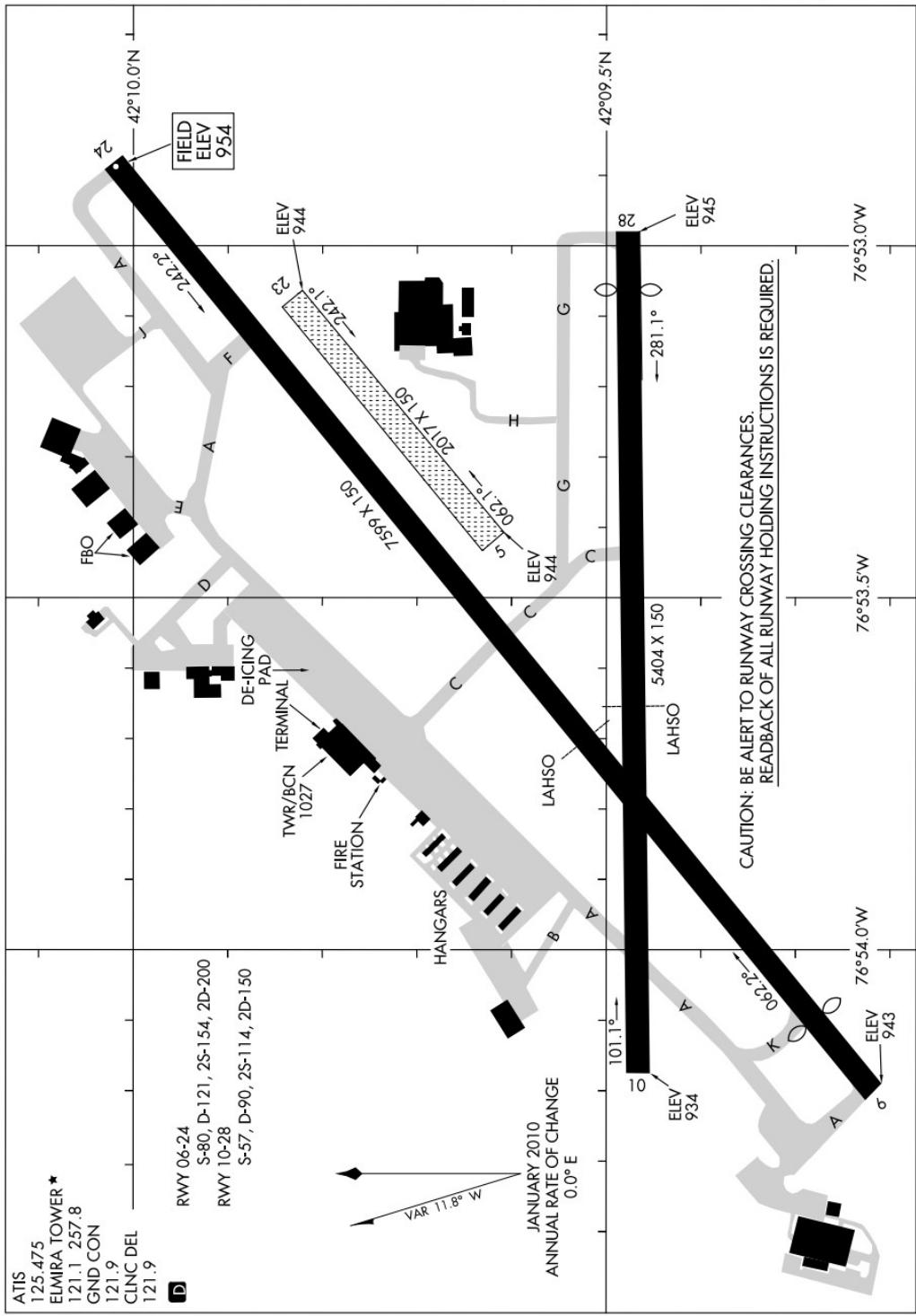
EASTON, MARYLAND
EASTON/NEWNAM FIELD (ESN)

AIRPORT DIAGRAM

10210

AIRPORT DIAGRAM

AL-131 (FAA)

ELMIRA/CORNING RGNL (ELM)
ELMIRA, NEW YORK

AIRPORT DIAGRAM

10210

ELMIRA, NEW YORK

ELMIRA/CORNING RGNL (ELM)

10210

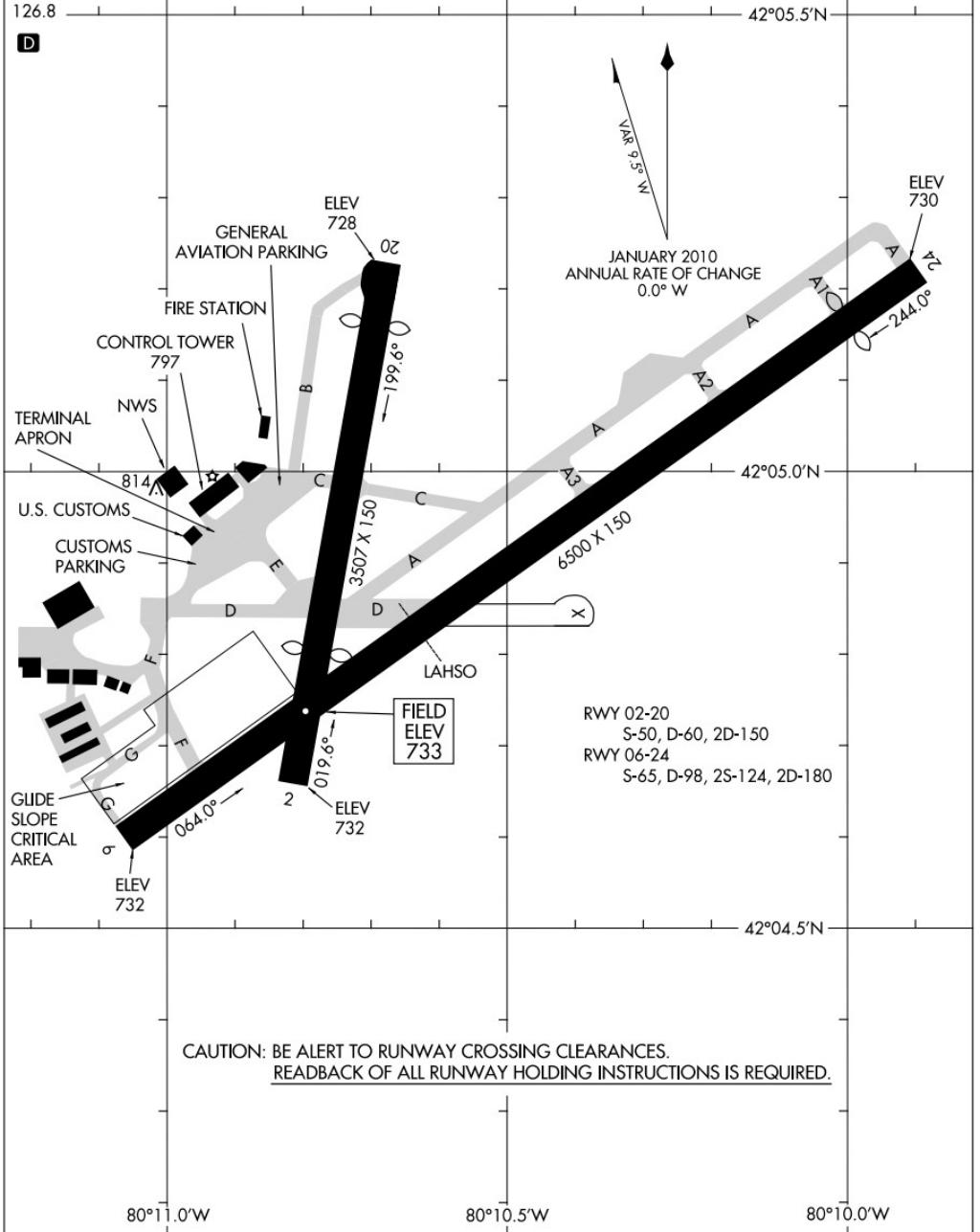
AIRPORT DIAGRAM

AL-139 (FAA)

ERIE INTL/TOM RIDGE FIELD (ERI)
ERIE, PENNSYLVANIA

ATIS
120.35
ERIE TOWER ★
118.1 257.8
GND CON
121.9
CLNC DEL
126.8

D



AIRPORT DIAGRAM

10210

ERIE, PENNSYLVANIA

ERIE INTL/TOM RIDGE FIELD (ERI)

570

AIRPORT DIAGRAMS

10266

AIRPORT DIAGRAM

FALMOUTH/CAPE COD COAST GUARD AIR STATION (FMH)
AL-10362 (FAA)

FALMOUTH, MASSACHUSETTS

ATIS
120.475 236.825
COAST GUARD TOWER
121.0 291.1
GND CON
124.15 275.8

1000 X 200 [FIELD ELEV 130]

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

RWY 05-23
PCN 33 F/A/W/T
S-65, D-160, 2S-175, 2D-330
RWY 14-32
PCN 26 F/A/W/T
S-65, D-160, 2S-175, 2D-330

41°40.0'N
HOT CARGO AREA

ARNG

FIRE STATION

ELEV 111

1000 X 200

054.1°

ANG

TANKS

269 *

70°32.0'W

70°31.0'W

1000 X 200

ELEV 125

234.1°

1000 X 200

322.6°

ELEV 110

1000 X 200

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° E

VAR 15.2° W

NE. 23 SEP 2010 to 18 NOV 2010

AIRPORT DIAGRAM

10266

FALMOUTH, MASSACHUSETTS
FALMOUTH/CAPE COD COAST GUARD AIR STATION (FMH)

NE. 23 SEP 2010 to 18 NOV 2010

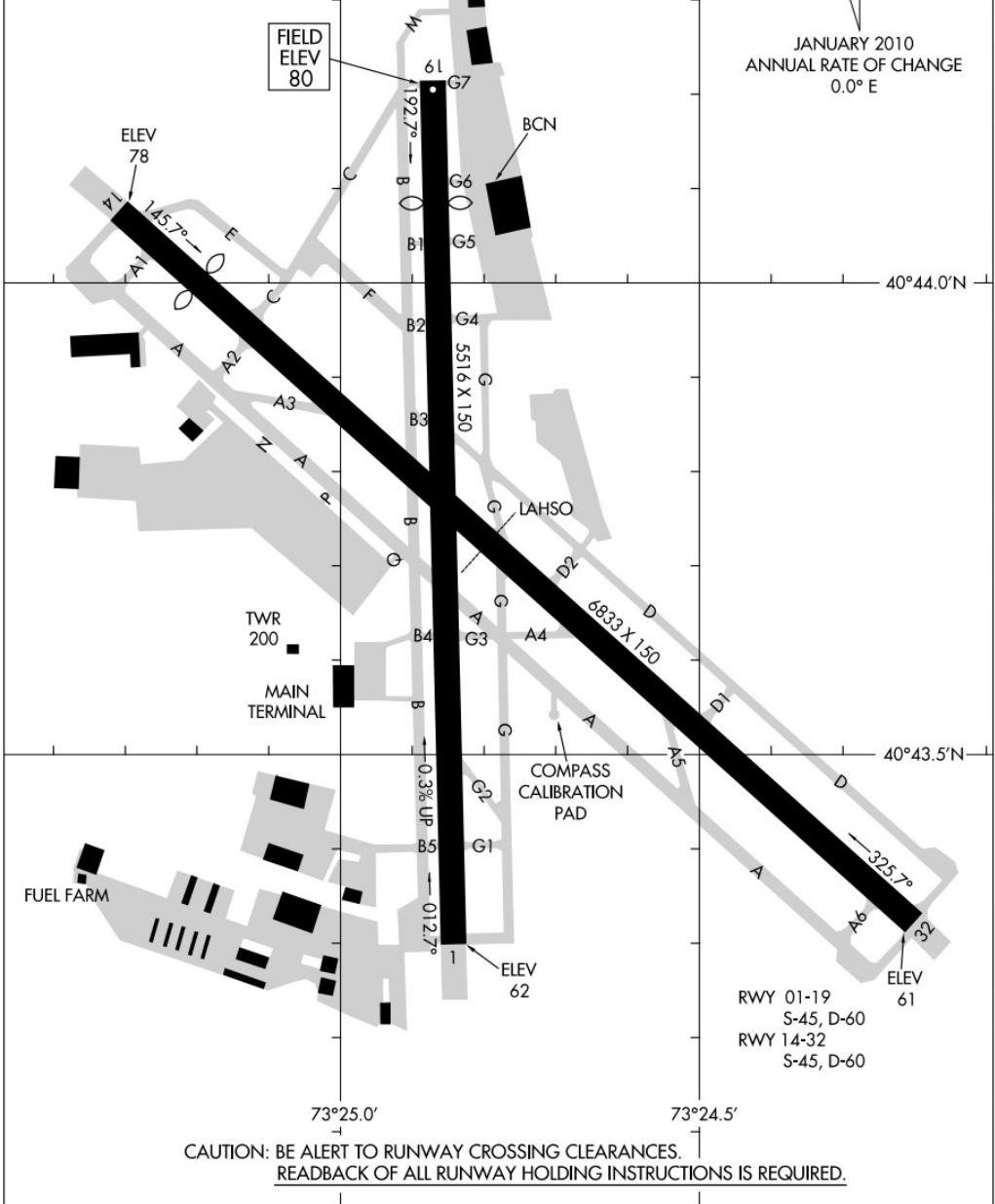
10210

AIRPORT DIAGRAM

AL-704 (FAA)

FARMINGDALE / REPUBLIC (FRG)
FARMINGDALE, NEW YORK

ATIS
126.65
REPUBLIC TOWER★
118.8 279.65
GND CON
121.6 269.6
CLNC DEL
128.25



AIRPORT DIAGRAM

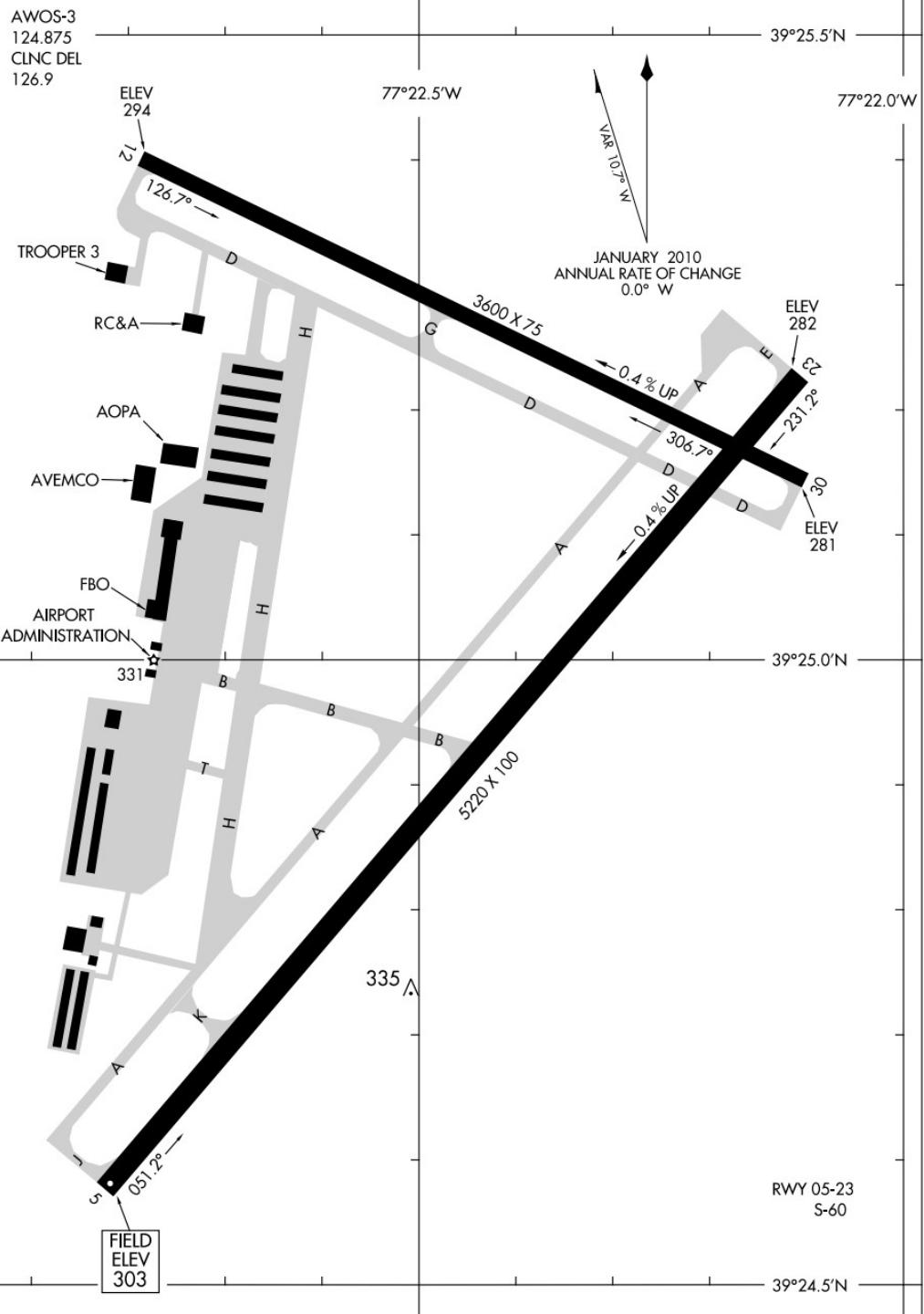
10210

FARMINGDALE, NEW YORK
FARMINGDALE / REPUBLIC (FRG)

10210

AIRPORT DIAGRAM

AL-5089 (FAA)

FREDERICK MUNI (FDK)
FREDERICK, MARYLAND

AIRPORT DIAGRAM

10210

FREDERICK, MARYLAND
FREDERICK MUNI (FDK)

10210

AIRPORT DIAGRAM

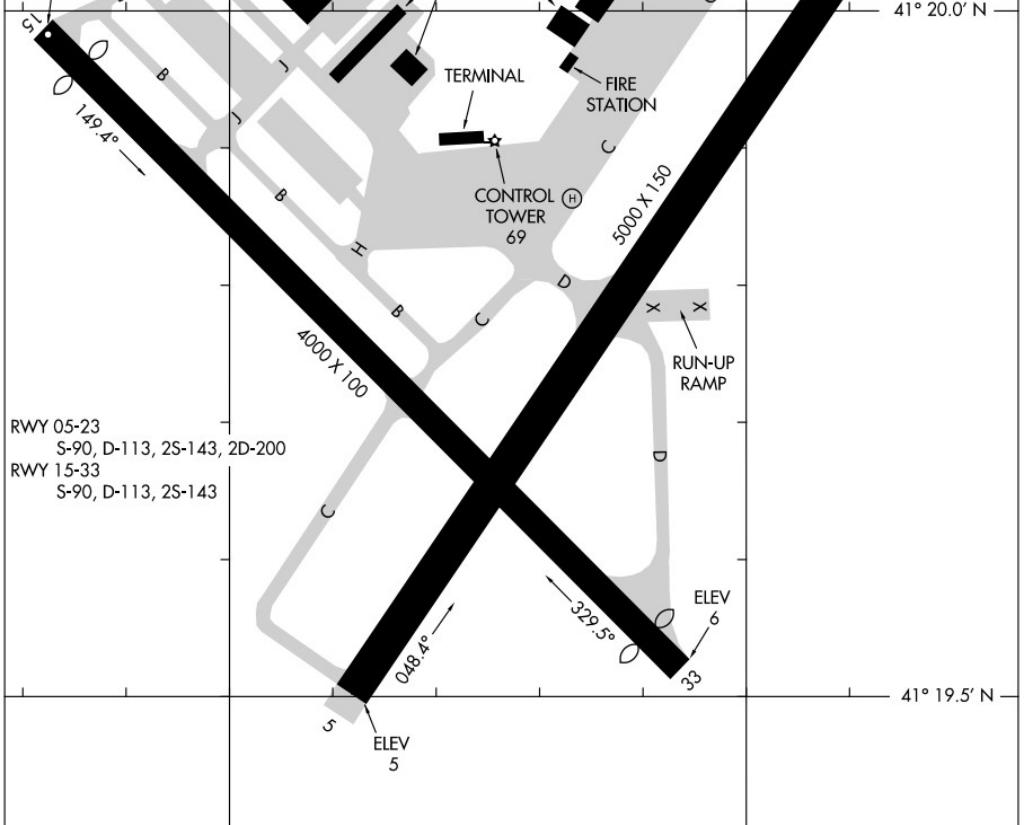
AL-5049 (FAA)

GROTON-NEW LONDON (GON)
GROTON (NEW LONDON), CONNECTICUT

ATIS
127.0
GROTON TOWER*
125.6 352.8
GND CON
121.65 352.8
CLNC DEL (When Tower Closed)
119.85

D

FIELD ELEV 9



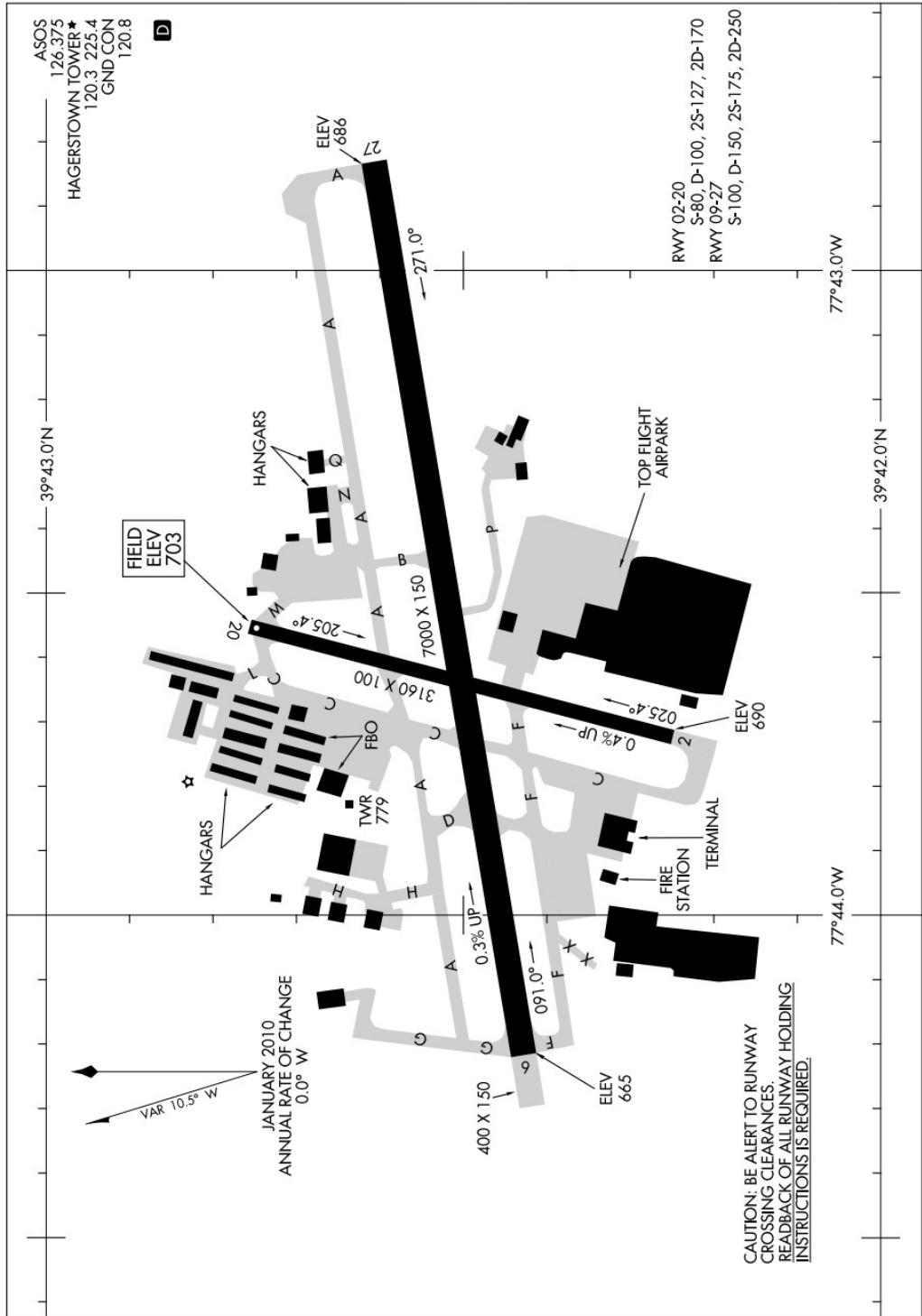
AIRPORT DIAGRAM
10210

GROTON (NEW LONDON), CONNECTICUT
GROTON-NEW LONDON (GON)

0210

AIRPORT DIAGRAM

HAGERSTOWN RGNL-RICHARD A HENSON FIELD (HGR)
AL-5114 (FAA) HAGERSTOWN, MARYLAND



AIRPORT DIAGRAM

0210

HAGERSTOWN, MARYLAND

NE, 23 SEP 2010 to 18 NOV 2010

10266

AIRPORT DIAGRAM

AL-187 (FAA)

HARRISBURG / CAPITAL CITY (CXY)
HARRISBURG, PENNSYLVANIA

ATIS
134.95
CAPITAL CITY TOWER ★
119.5 257.8
GND CON
121.9

FIELD
ELEV
347

RWY 08-26
S-65, D-105, 2S-133, 2D-185
RWY 12-30
S-40, D-65, 2S-82, 2D-115

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

40°13.5'N

GENERAL AVIATION PARKING

TERMINAL

TWR

ELEV

334

HS 2

0.3% UP

127.8°

HS 1

F

LAHSO

GENERAL AVIATION
PARKING

ELEV

335

3925 X 100

C

HS 3

082.5°

B

D

5001 X 150

ELEV

344

A

452

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

76°51.5'W

76°51.0'W

76°50.5'W

AIRPORT DIAGRAM
10266HARRISBURG, PENNSYLVANIA
HARRISBURG / CAPITAL CITY (CXY)

576

AIRPORT DIAGRAMS

10210

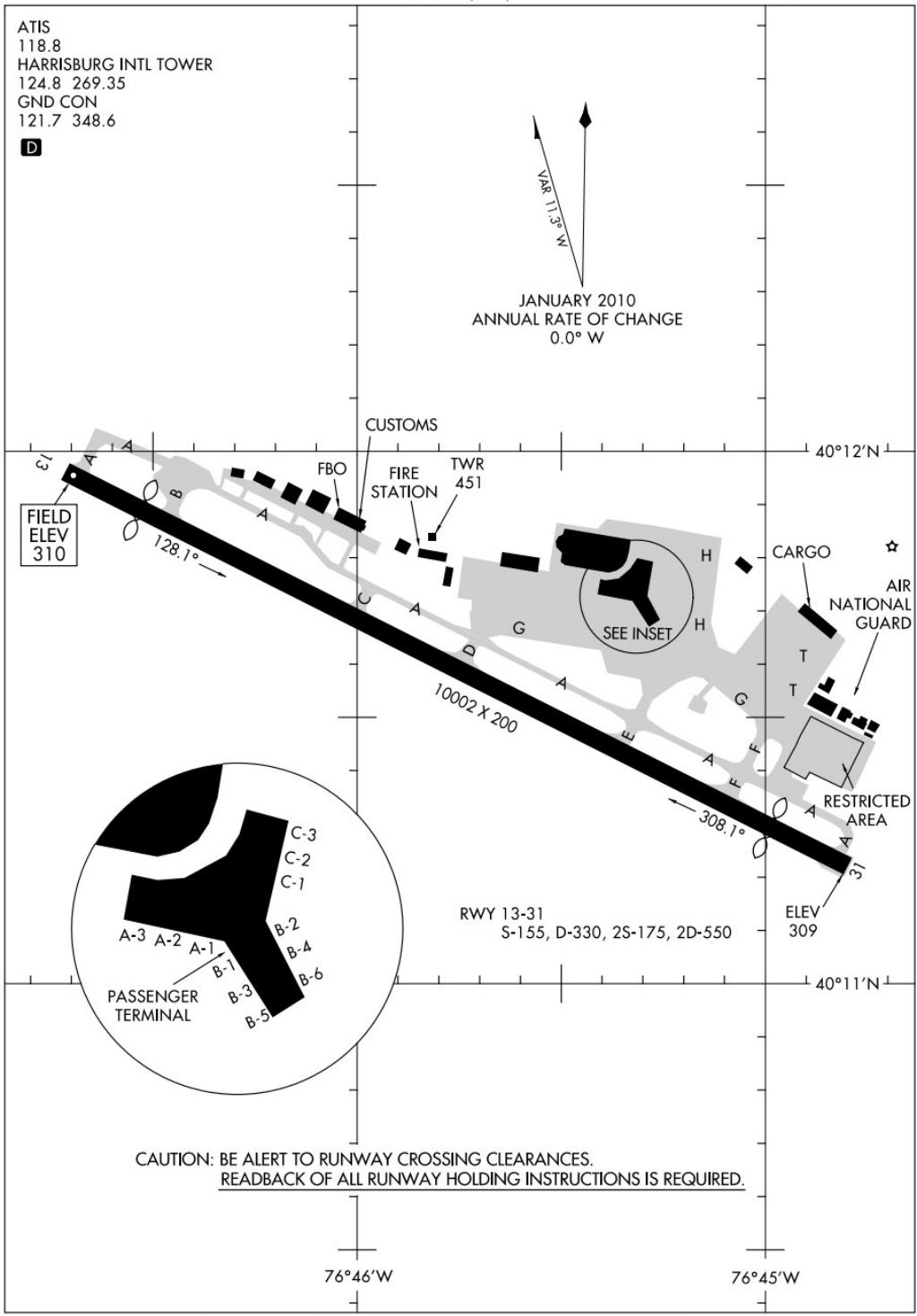
AIRPORT DIAGRAM

AL-188 (FAA)

HARRISBURG INTL (MDT)
HARRISBURG, PENNSYLVANIA

ATIS
118.8
HARRISBURG INTL TOWER
124.8 269.35
GND CON
121.7 348.6

D



AIRPORT DIAGRAM

10210

HARRISBURG, PENNSYLVANIA
HARRISBURG INTL (MDT)

10210

AIRPORT DIAGRAM

AL-189 (FAA)

HARTFORD-BRAINARD (HFD)
HARTFORD, CONNECTICUT

ATIS
126.45
BRAINARD TOWER ★
119.6 248.2
GND CON
121.6
CLNC DEL
121.6

72°39.5'W

41°44.5'N

72°39.0'W

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E

RWY 02-20
S-30, D-43, 2D-70
RWY 11-29
S-10

CONTROL
TOWER
75 ★

ELEV
14

B

2314 X 71

>

B

A118

ELEV
12

2

ELEV
11

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

HARTFORD, CONNECTICUT

HARTFORD-BRAINARD (HFD)

AIRPORT DIAGRAM

10210

NE. 23 SEP 2010 to 18 NOV 2010

578

AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

AL-196 (FAA)

HOUlTON INTL (HUL)
HOUlTON, MAINE

ASOS
132.025
CTAF/UNICOM
122.8

46° 08' N

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° E

ELEV
478

ELEV
474

ELEV
483

200
X 100

NORTH

0.600' L

09° X 000'L

0.600' L

X

X

X

X

X

X

X

X

X

X

ELEV
490

229.0°

A

B

C

C

D

E

F

G

H

I

J

PASSENGER
TERMINAL
NWS
U.S. CUSTOMS
CANADIAN CUSTOMS

RWY 05-23
S-30, D-57

67° 48' W

67° 47' W

Λ_{883±}

AIRPORT DIAGRAM
10210

HOUlTON, MAINE
HOUlTON INTL (HUL)

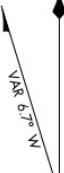
10210

AIRPORT DIAGRAM

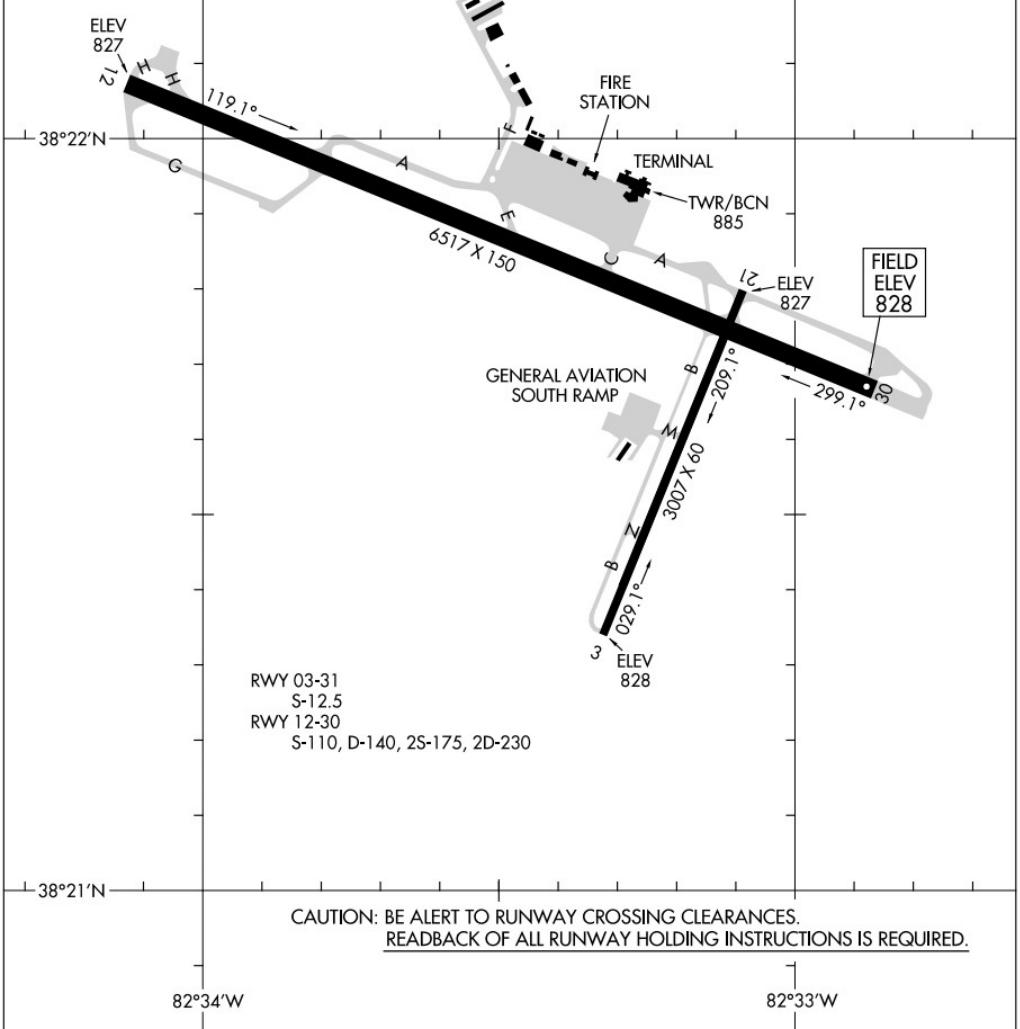
HUNTINGTON/ TRI-STATE/MILTON J. FERGUSON FIELD (HTS)
AL-532 (FAA)

ATIS
125.2
HUNTINGTON TOWER
118.5 270.1
GND CON
121.9
CLNC DEL
118.05
D

A 991±



JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W



AIRPORT DIAGRAM
10210

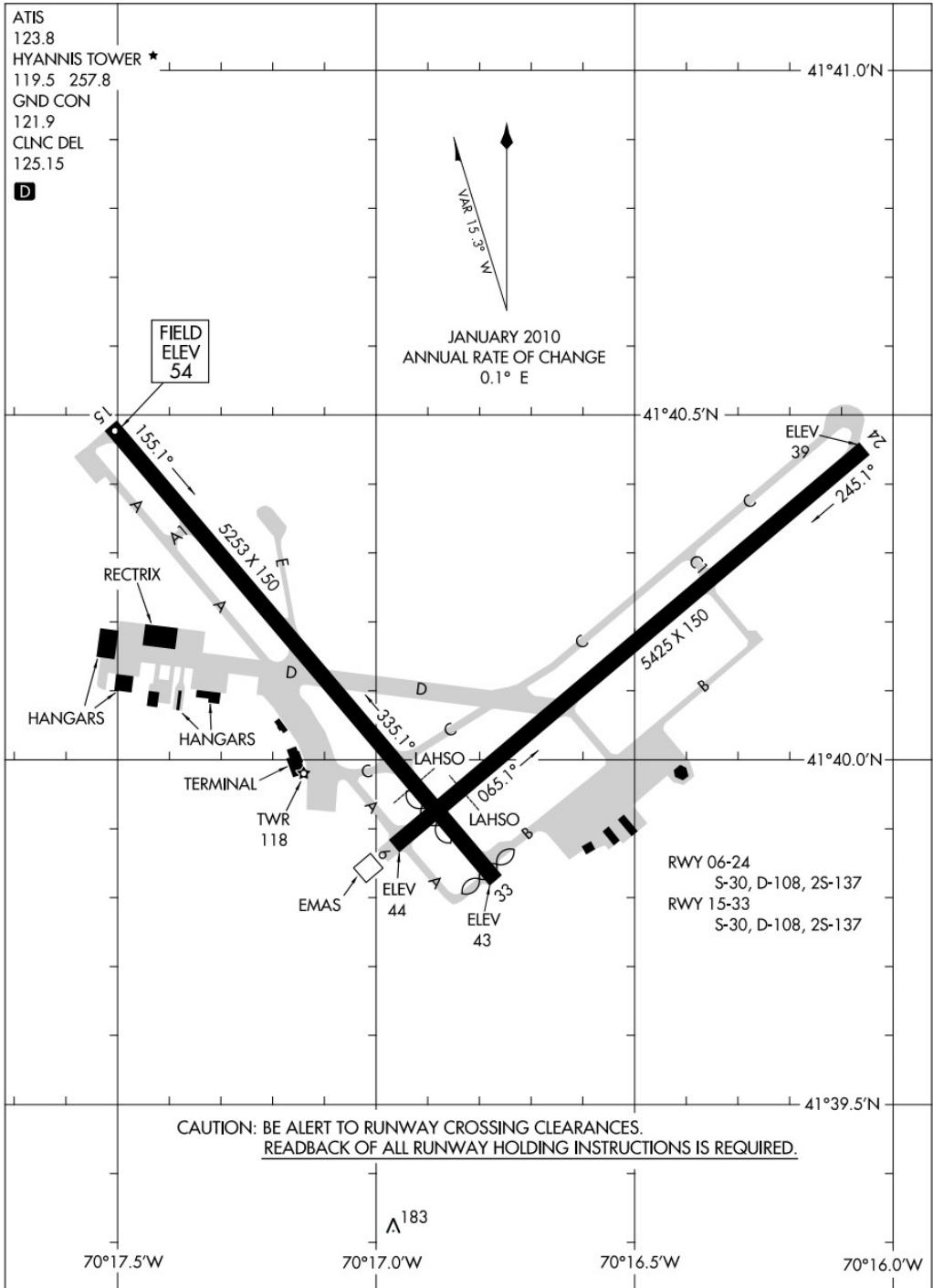
HUNTINGTON, WEST VIRGINIA
HUNTINGTON/ TRI-STATE/MILTON J. FERGUSON FIELD (HTS)

AIRPORT DIAGRAM

HYANNIS/BARNSTABLE MUNI-BOARDMAN/POLAND FIELD (HYA)

AL-675 (FAA)

HYANNIS, MASSACHUSETTS



10210

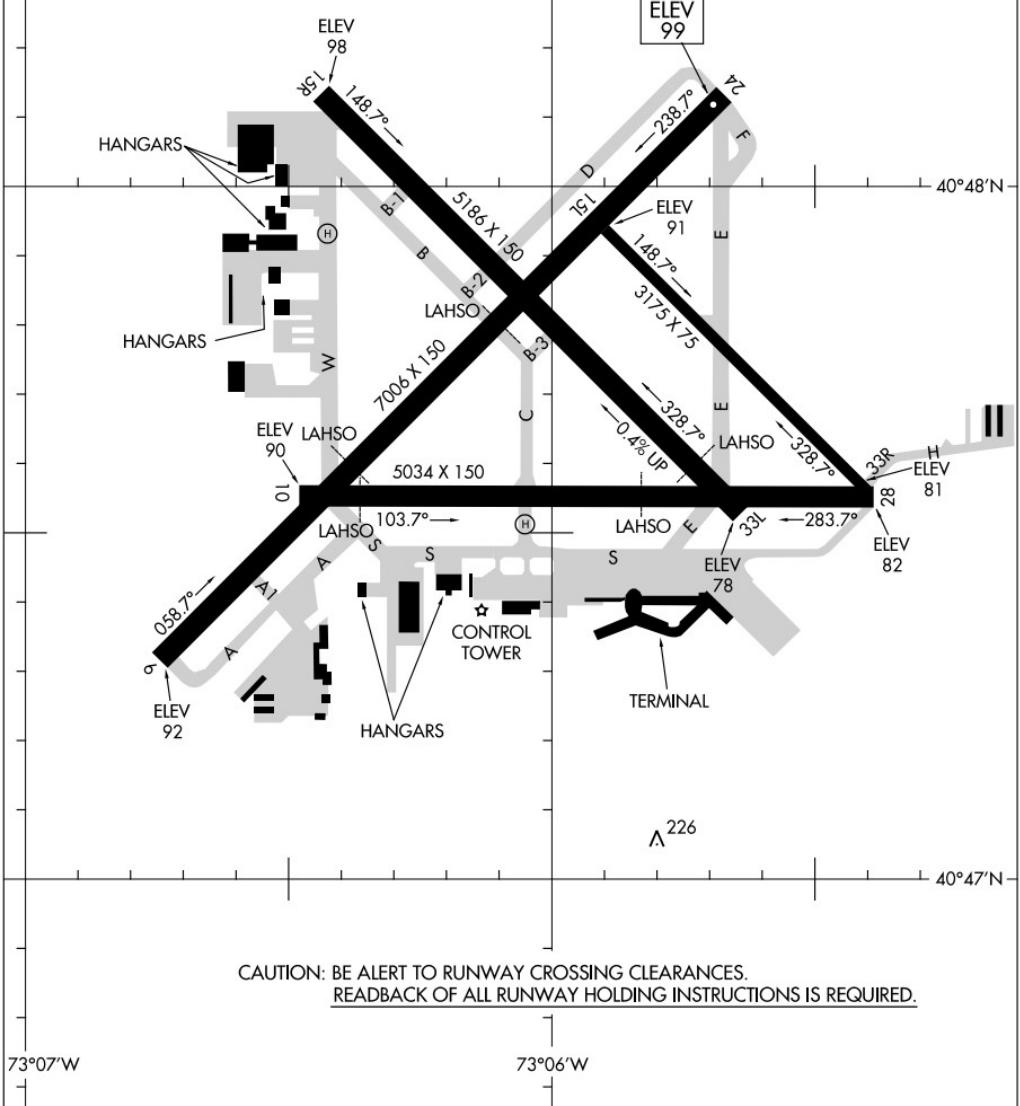
AIRPORT DIAGRAM

AL-948 (FAA)

ISLIP/ LONG ISLAND MACARTHUR (ISP)
ISLIP, NEW YORK

ATIS
120.725
LONG ISLAND TOWER ★
119.3 335.5
GND CON
135.3
CLNC DEL
121.85

RWY 06-24
S-100, D-210, 2S-175, 2D-300
RWY 10-28
S-32, D-56, 2D-92
RWY 15L-33R
S-25
RWY 15R-33L
S-100, D-170, 2S-175, 2D-300



AIRPORT DIAGRAM
10210

ISLIP, NEW YORK
ISLIP/ LONG ISLAND MACARTHUR (ISP)

10210

AIRPORT DIAGRAM

JOHNSTOWN / JOHN MURTHA JOHNSTOWN-CAMBRIA COUNTY (JST)
AL-898 (FAA) JOHNSTOWN, PENNSYLVANIA

ATIS
118.325
JOHNSTOWN TOWER*
125.75
GND CON
121.6

- D - 40°19.5'N

JOHNSTOWN, PENNSYLVANIA

AL-898 (FAA)

JOHNSTOWN, PENNSYLVANIA

▲ 1996 年 1 月 1 日

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

HANGARS

ELEV
2270

1

☆ TWP
236

2

40°19.0'N

FIELD
ELEV
2284

7003 X 150

40°18.5'N

78°50'0''W

30840 E/W

RWY 05-23
S-62, D-87, 2S-110
RWY 15-33
S-93, D-183, 2D-357, 2D/2D2-845

**CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.**

AIRPORT DIAGRAM

10210

JOHNSTOWN, PENNSYLVANIA

JOHNSTOWN PENNSYLVANIA

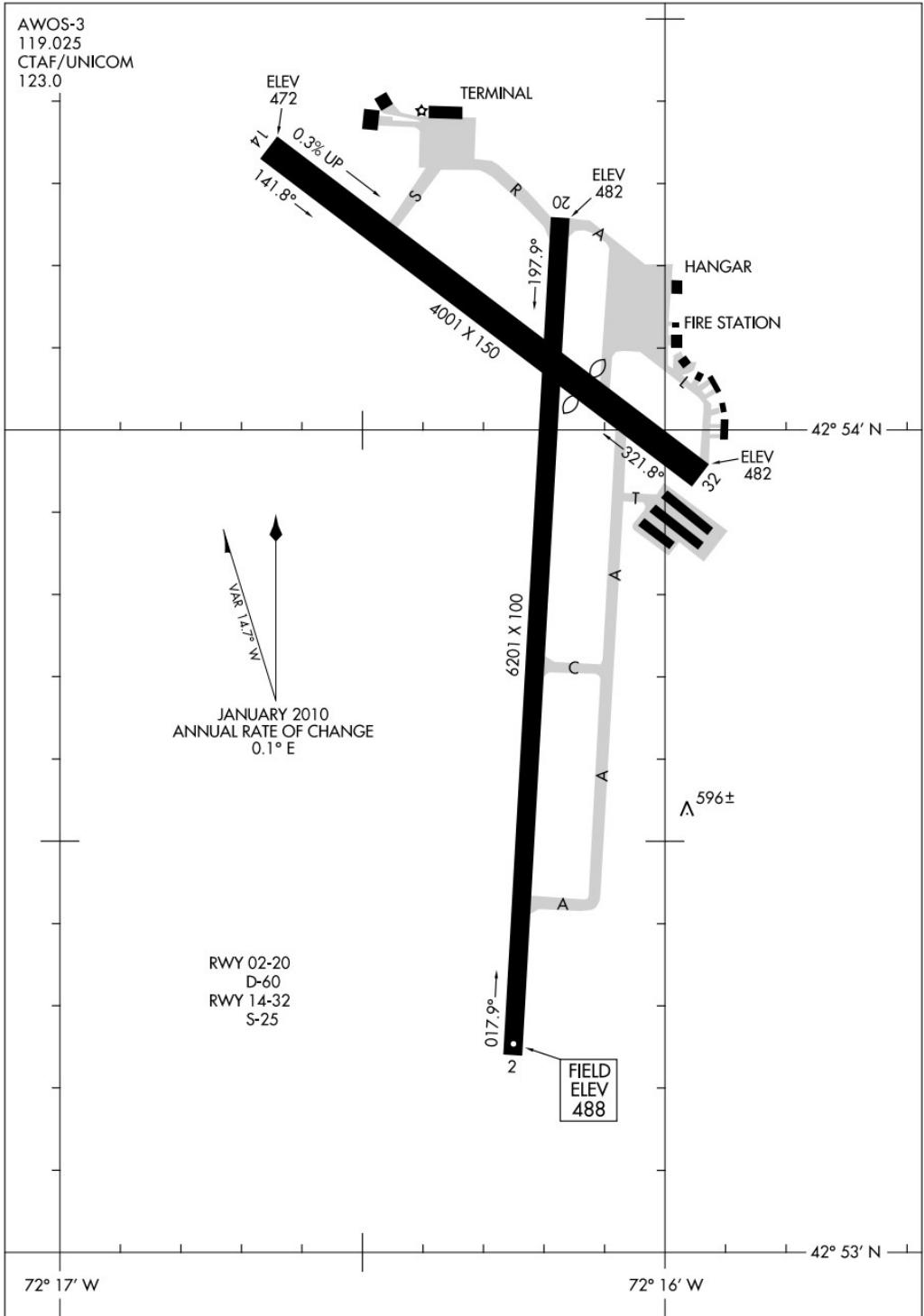
584

AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

AI-868 (FAA)

KEENE / DILLANT-HOPKINS (EEN)
KEENE, NEW HAMPSHIREAIRPORT DIAGRAM
10210KEENE, NEW HAMPSHIRE
KEENE / DILLANT-HOPKINS (EEN)

09351

AIRPORT DIAGRAM

AFD-223 [USN]

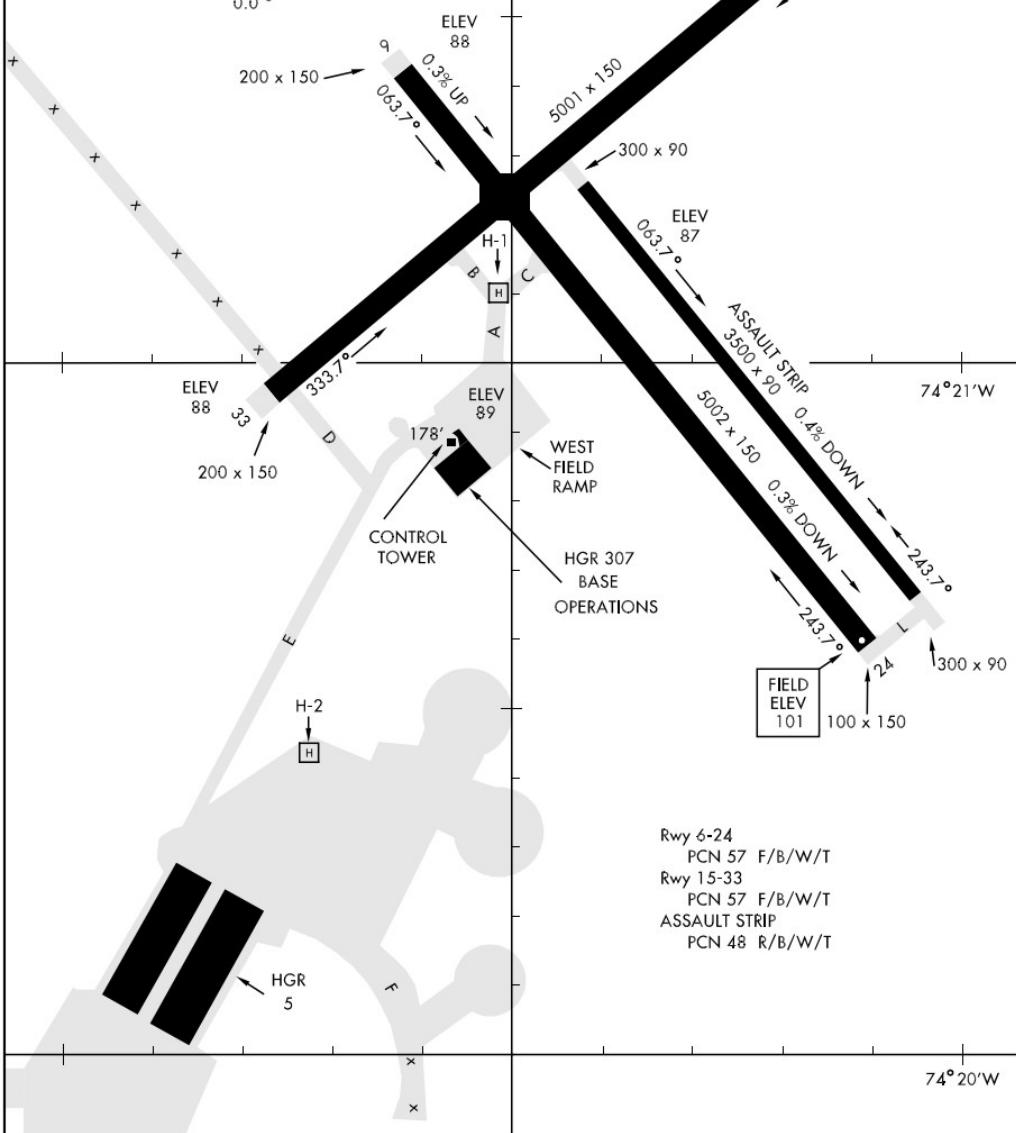
LAKEHURST NAES (MAXFIELD FLD) (KNEL)

LAKEHURST, NEW JERSEY

LAKEHURST TOWER *

127.775 360.2
GND CON
118.375 307.05

VAR 12.7° W
DECEMBER 2009
ANNUAL RATE OF CHANGE
0.0 °

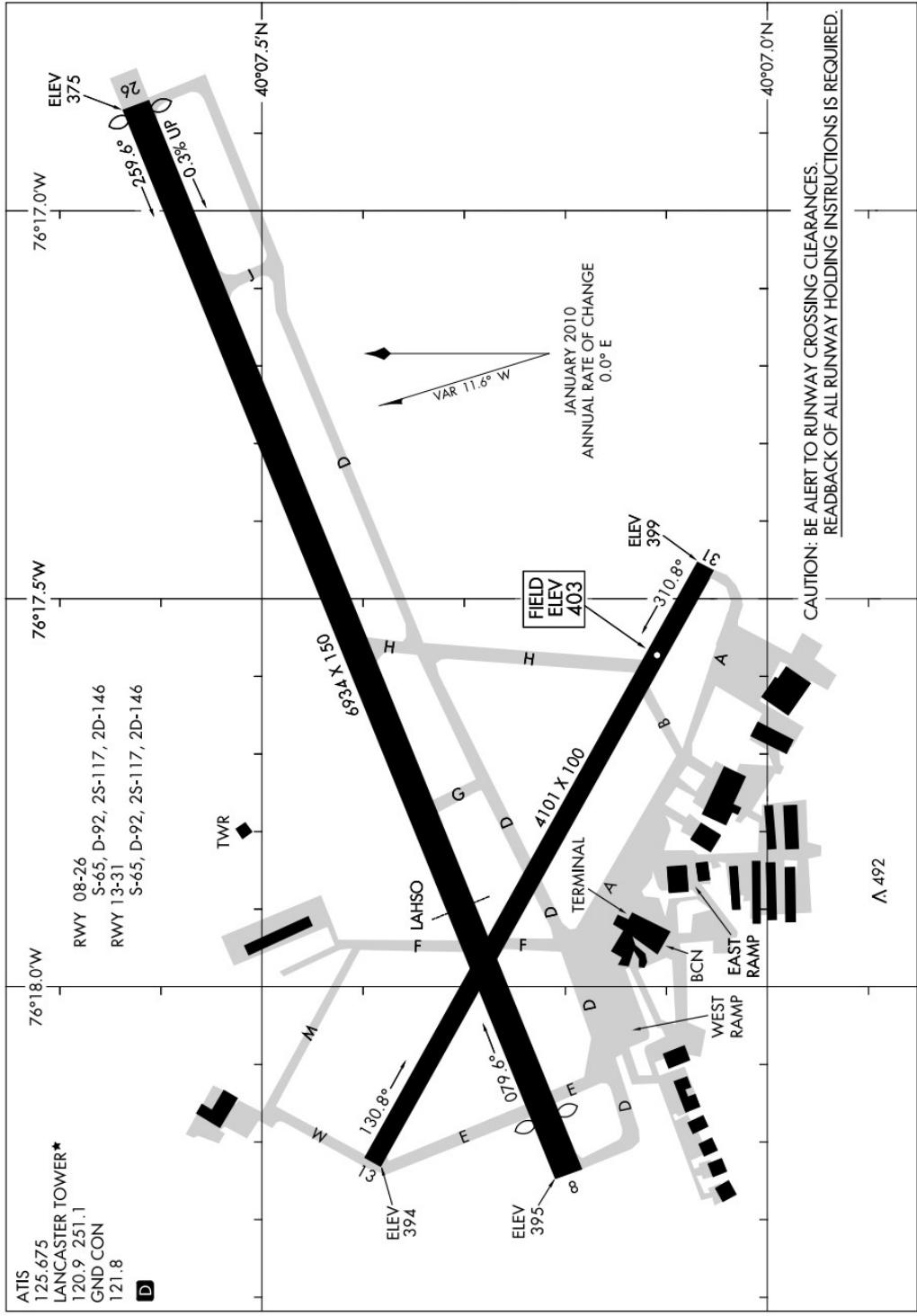


86

AIRPORT DIAGRAM

AL-927 (FAA)

LANCASTER (LNS)
LANCASTER, PENNSYLVANIA



AIRPORT DIAGRAM

0210

LANCASTER, PENNSYLVANIA
LANCASTER (LNS)

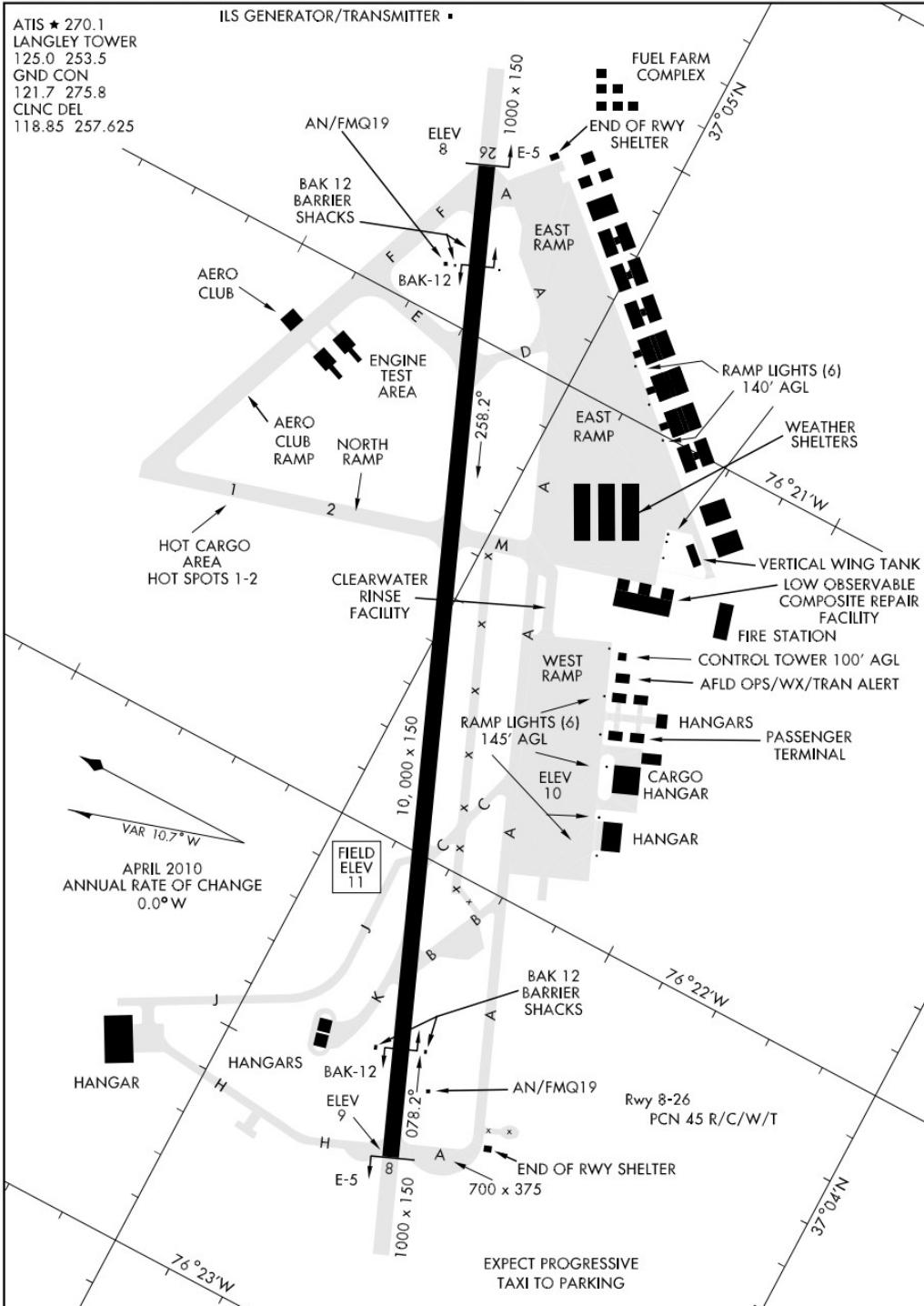
10098

AIRPORT DIAGRAM

AFD-185 [USAF]

LANGLEY AFB (KLFI)
HAMPTON, VIRGINIA

ATIS ★ 270.1
LANGLEY TOWER
125.0 253.5
GND CON
121.7 275.8
CLNC DEL
118.85 257.625



AIRPORT DIAGRAM

HAMPTON, VIRGINIA
LANGLEY AFB (KLEI)

NE, 23 SEP 2010 to 18 NOV 2010

10210

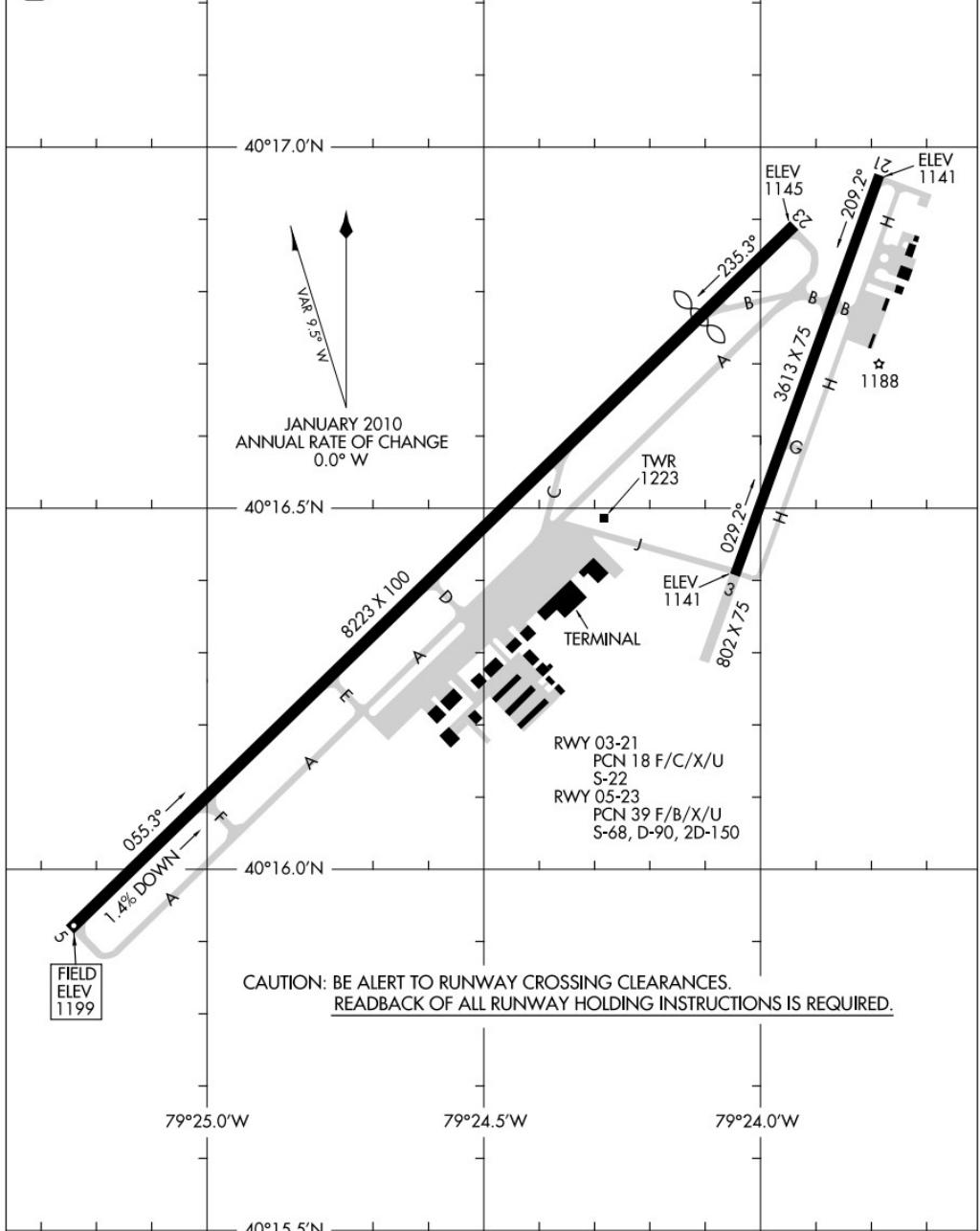
AIRPORT DIAGRAM

AL-5125 (FAA)

LATROBE/ARNOLD PALMER RGNL (LBE)
LATROBE, PENNSYLVANIA

ATIS
118.375
PALMER TOWER ★
125.0
GND CON
121.8

D



AIRPORT DIAGRAM

10210

LATROBE, PENNSYLVANIA
LATROBE/ARNOLD PALMER RGNL (LBE)

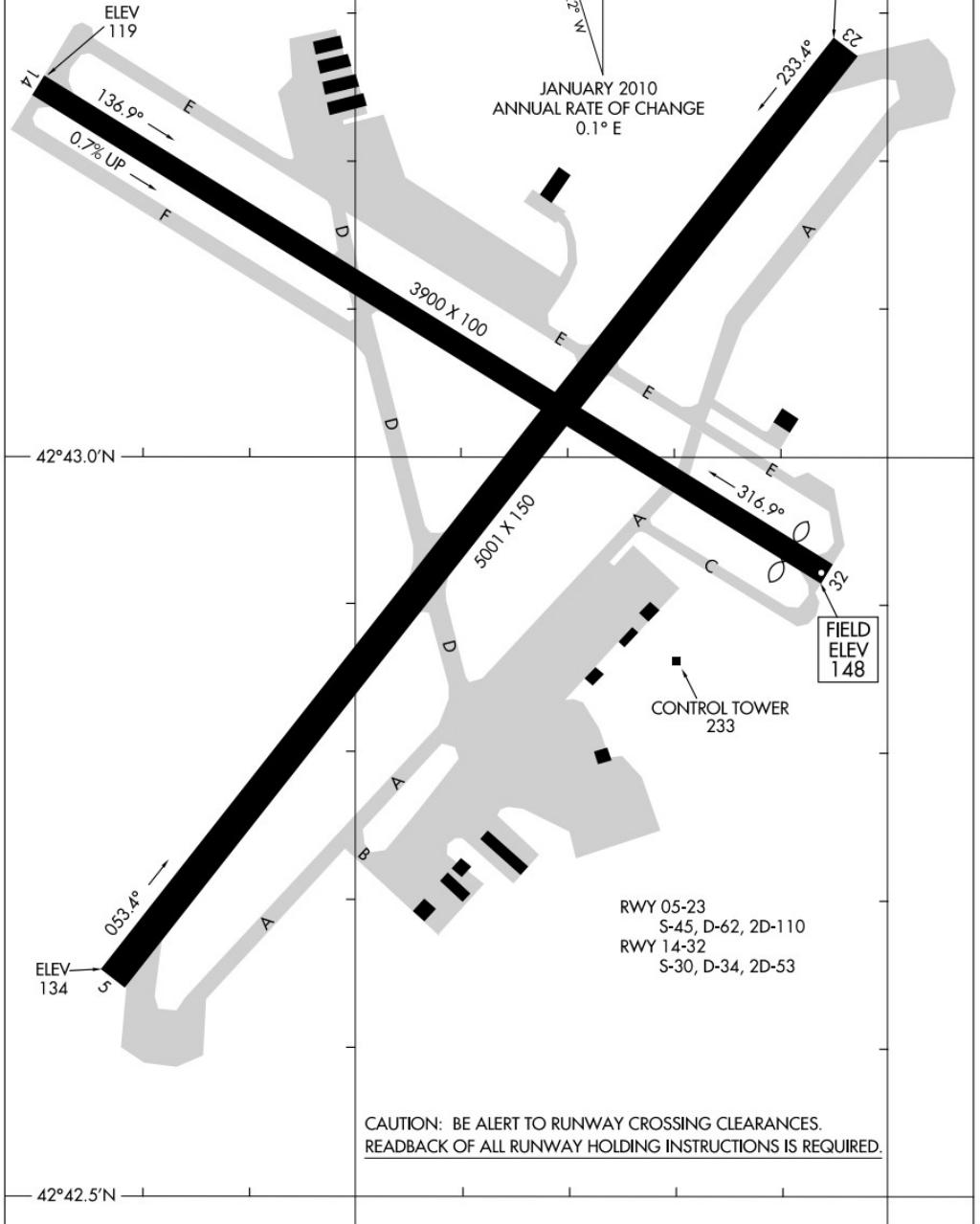
10210

AIRPORT DIAGRAM

AL-654 (FAA)

LAWRENCE MUNI (LWM)
LAWRENCE, MASSACHUSETTS

ATIS
126.75
LAWRENCE TOWER ★
119.25
GND CON
124.3
CLNC DEL
124.3



AIRPORT DIAGRAM

10210

LAWRENCE, MASSACHUSETTS
LAWRENCE MUNI (LWM)

10266

AIRPORT DIAGRAM

AL-859 (FAA)

LEBON MUNI (LEB)
LEBON, NEW HAMPSHIRE

ATIS
118.65
LEBON TOWER★
125.95 385.5
GND CON
121.6

72°18.5'W

72°18.0'W

43°38.0'N

NORTH RAMP

ELEV
563TWR
634

HS 2

B1

B2

43°37.5'N

ELEV
563

WEST RAMP

43°37.0'N

RWY 07-25
S-42, D-60
RWY 18-36
S-42, D-48

B

D

A

B

C

A1

B1

B2

B3

B4

B

C

D

E

F

G

H

I

J

K

L

8L

ELEV
563

5496 X 100

183.0°

0.8% UP

36

003.0°

FIELD
ELEV
603

VAR 15.0° W

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° E

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

10266

LEBON, NEW HAMPSHIRE
LEBON MUNI (LEB)

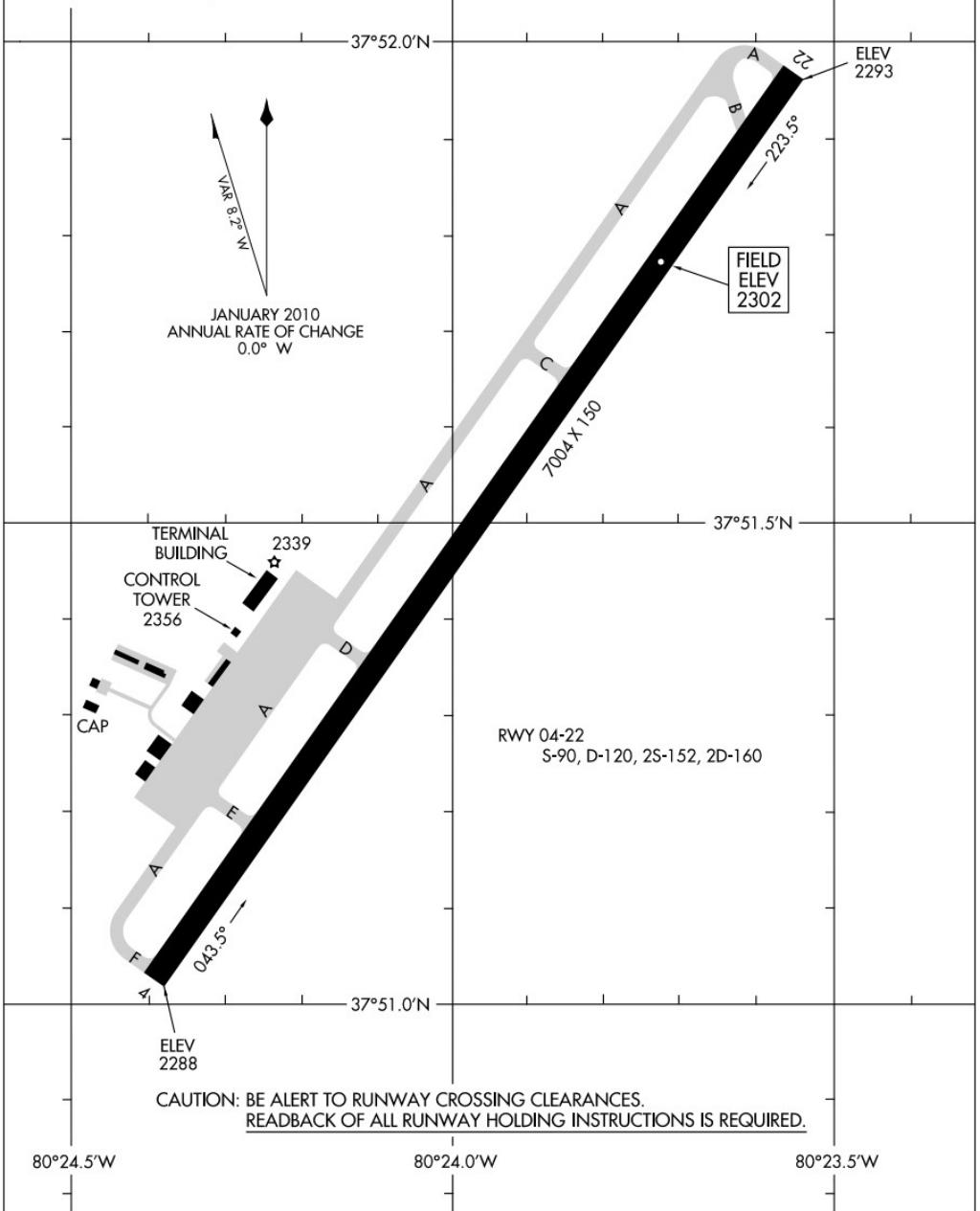
10210

AIRPORT DIAGRAM

AL-5601 (FAA)

LEWISBURG/ GREENBRIER VALLEY (LWB)
LEWISBURG, WEST VIRGINIA

AWOS-3
121.4
LEWISBURG TOWER ★
118.9
GND CON
121.9
CLNC DEL
120.85 (When tower closed)



AIRPORT DIAGRAM

10210

LEWISBURG, WEST VIRGINIA
LEWISBURG/ GREENBRIER VALLEY (LWB)

10210

AIRPORT DIAGRAM

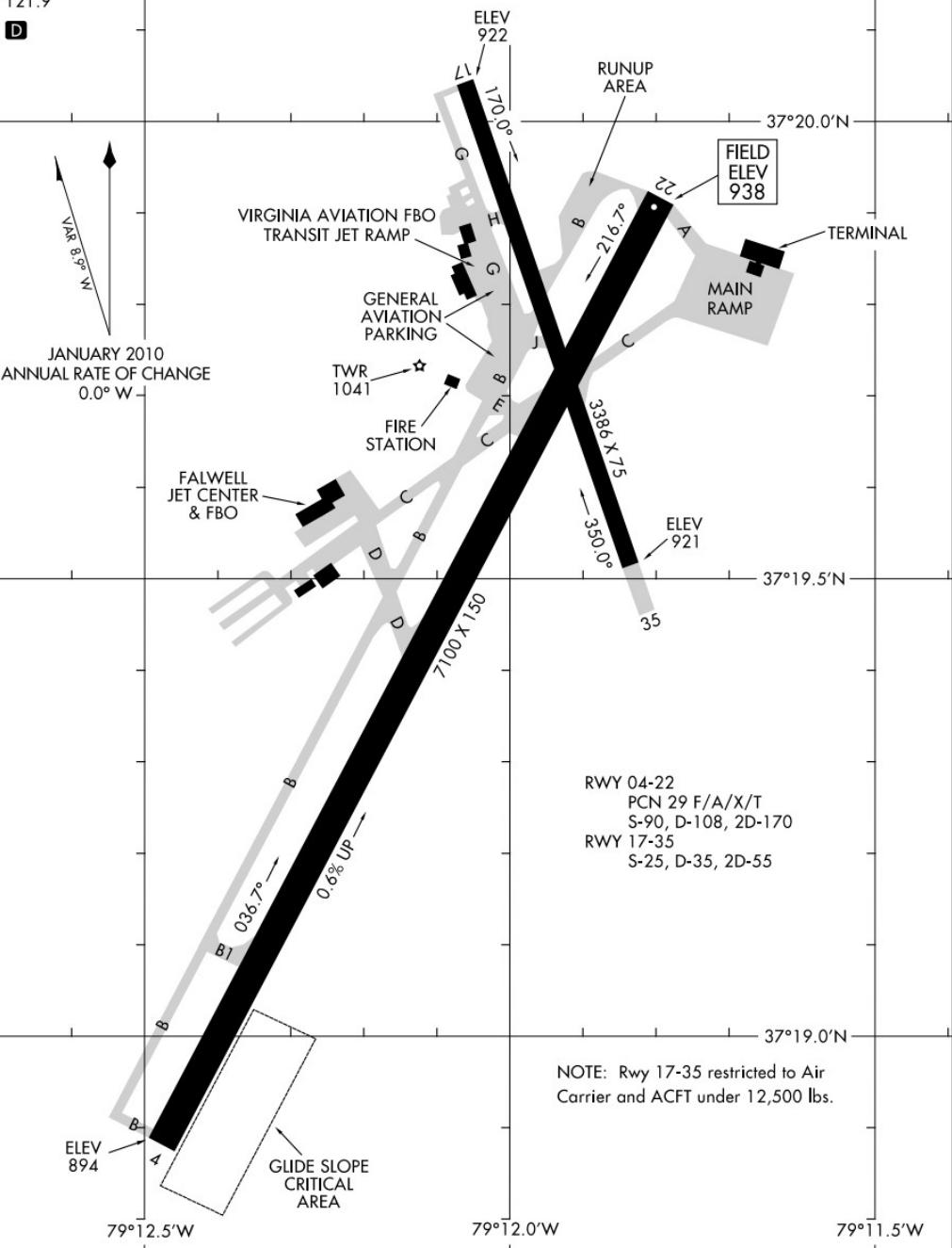
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)
AL-499 (FAA)

LYNCHBURG, VIRGINIA

ATIS
119.8
LYNCHBURG TOWER★
127.65 257.8
GND CON
121.9

D

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.



AIRPORT DIAGRAM

10210

LYNCHBURG, VIRGINIA

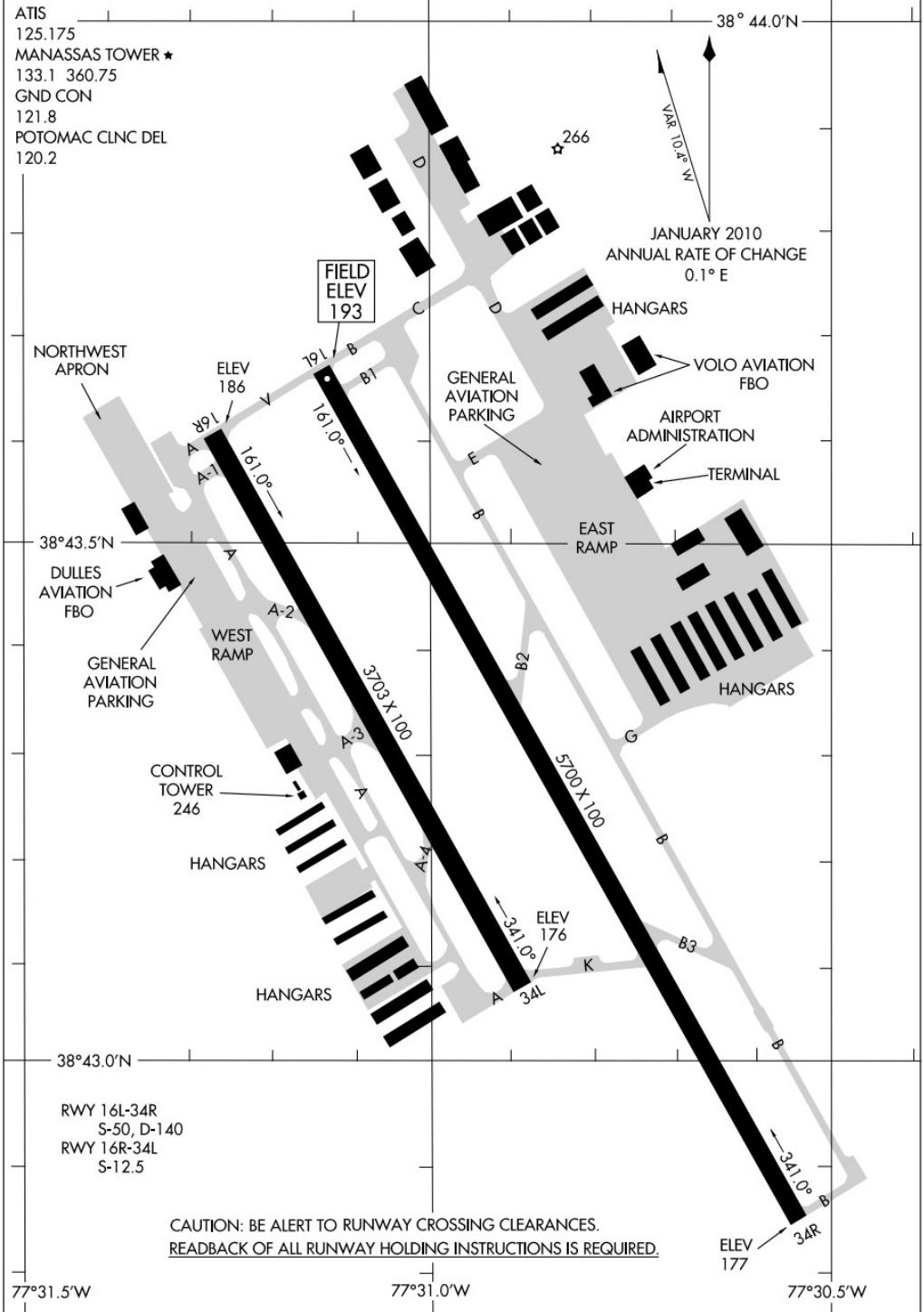
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

10210

AIRPORT DIAGRAM

MANASSAS RGNL/HARRY P. DAVIS FIELD (HEF)
AL-5326 (FAA)

MANASSAS, VIRGINIA

AIRPORT DIAGRAM
10210MANASSAS, VIRGINIA
MANASSAS RGNL/HARRY P. DAVIS FIELD (HEF)

10210

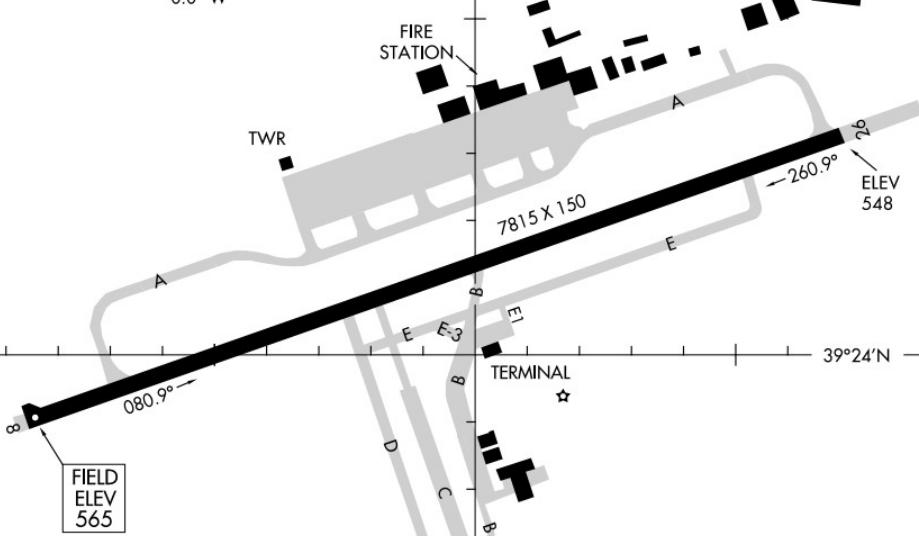
AIRPORT DIAGRAM

MARTINSBURG/
EASTERN WEST VIRGINIA RGNL/SHEPHERD FIELD (MRB)
AL-249 (FAA)
MARTINSBURG, WEST VIRGINIA

ASOS
119.925
MARTINSBURG TOWER ★
124.3 236.6
GND CON
121.8 275.8

39°25'N

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W



RWY 08-26
S-75, D-135, 2S-175, 2D-300,
2D/2D2-650

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

10210
AIRPORT DIAGRAM

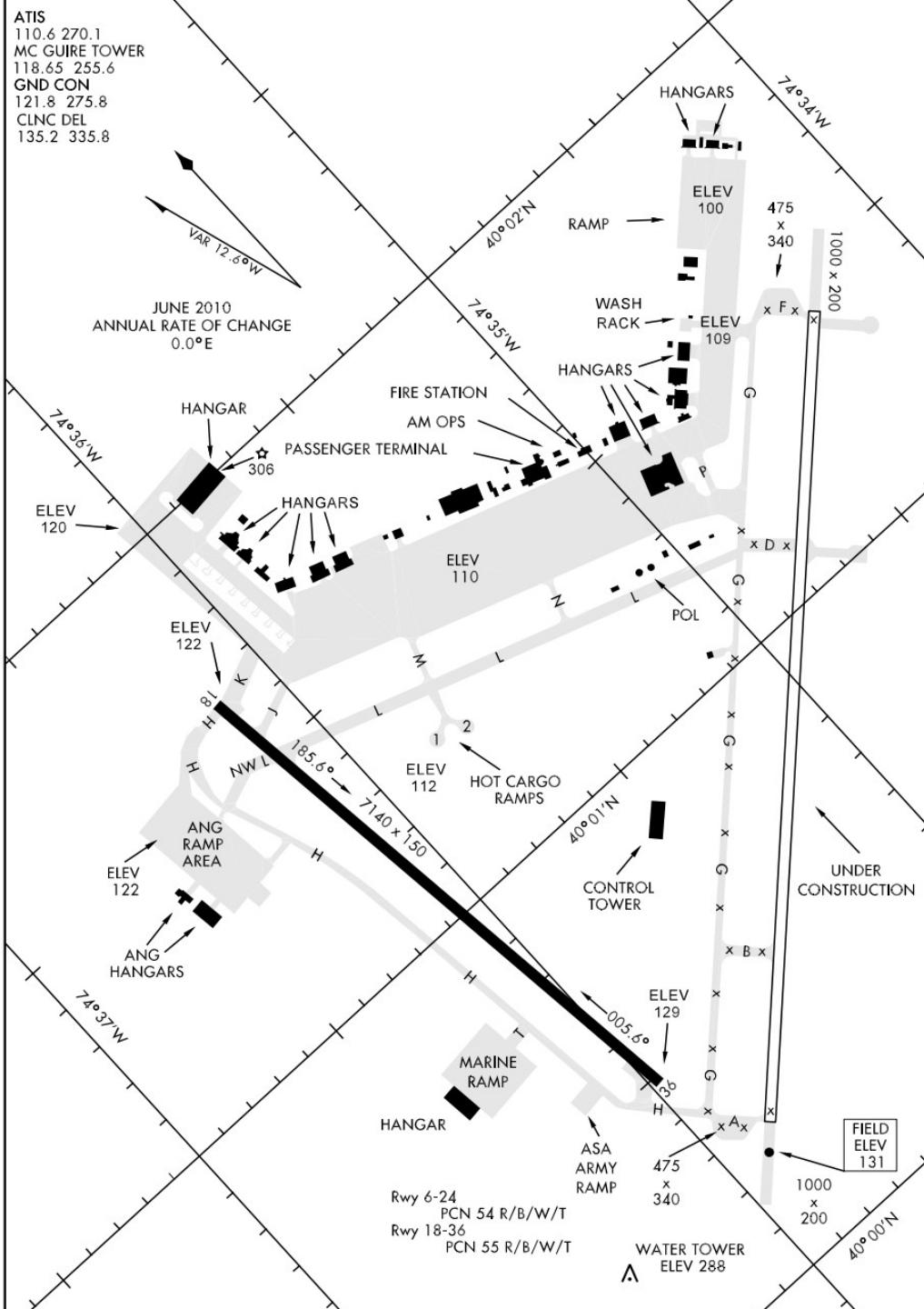
MARTINSBURG/
EASTERN WEST VIRGINIA RGNL/SHEPHERD FIELD (MRB)
MARTINSBURG, WEST VIRGINIA

AIRPORT DIAGRAMS

10154

AIRPORT DIAGRAM

AFD-150 [USAF]

MC GUIRE AFB (KWRI)
WRIGHTSTOWN, NEW JERSEY

AIRPORT DIAGRAM

WRIGHTSTOWN, NEW JERSEY
MC GUIRE AFB (KWRI)

10266

AIRPORT DIAGRAM

MORGANTOWN MUNI-WALTER L. BILL HART FIELD (MGW)
AL-479 (FAA)

MORGANTOWN, WEST VIRGINIA

MORGANTOWN TOWER *

125.1 257.8

GND CON

121.7

 $A^{1317\pm}$

D

ELEV 1236

39°39.0'N

181.4°

A

B

MAIN APRON
WATER TANK 1392
TERMINAL
TWR/BCN 1305
HANGARS
FIRE STATION
GA APRON

AIR CORPS
MAINTENANCE
AVIATION TECHNOLOGY HANGAR
WVU HANGAR

5198 X 150

ELEV 1241

36

ELEV 1244

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

ELEV

1241

233.9°

FIELD
ELEV
1248

39°38.5'N

C

COMPASS
ROSE

RWY 05-23
S-12.5
RWY 18-36
S-65, D-90, 2S-114, 2D-175

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

79°55.5'W

79°55.0'W

39°38.0'N

AIRPORT DIAGRAM

10266

MORGANTOWN, WEST VIRGINIA
MORGANTOWN MUNI-WALTER L. BILL HART FIELD (MGW)

10266

AIRPORT DIAGRAM

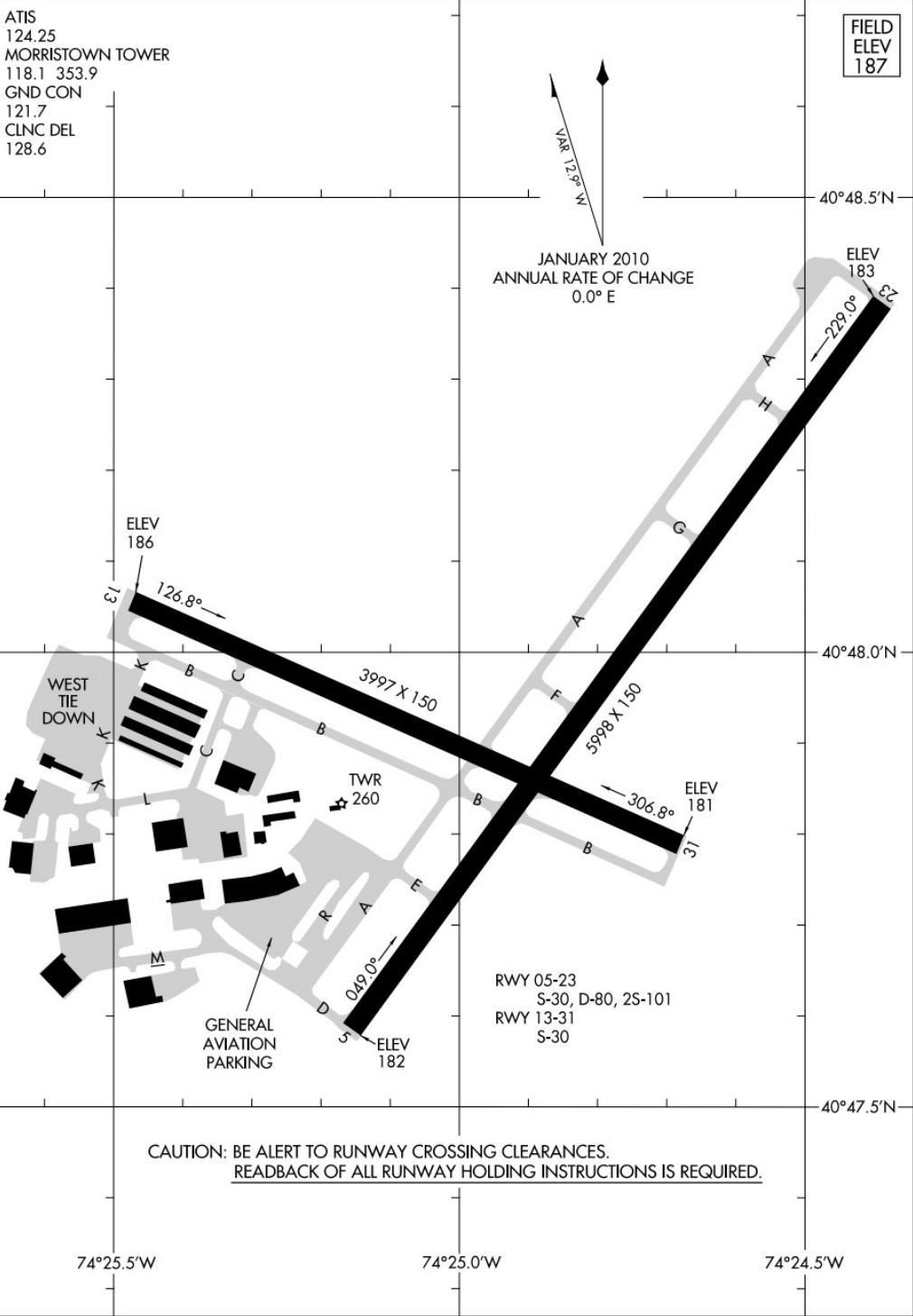
AL-931 (FAA)

MORRISTOWN MUNI (MMU)
MORRISTOWN, NEW JERSEY

ATIS
124.25
MORRISTOWN TOWER
118.1 353.9
GND CON
121.7
CLNC DEL
128.6

FIELD
ELEV
187

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E



AIRPORT DIAGRAM
10266

MORRISTOWN, NEW JERSEY
MORRISTOWN MUNI (MMU)

10210

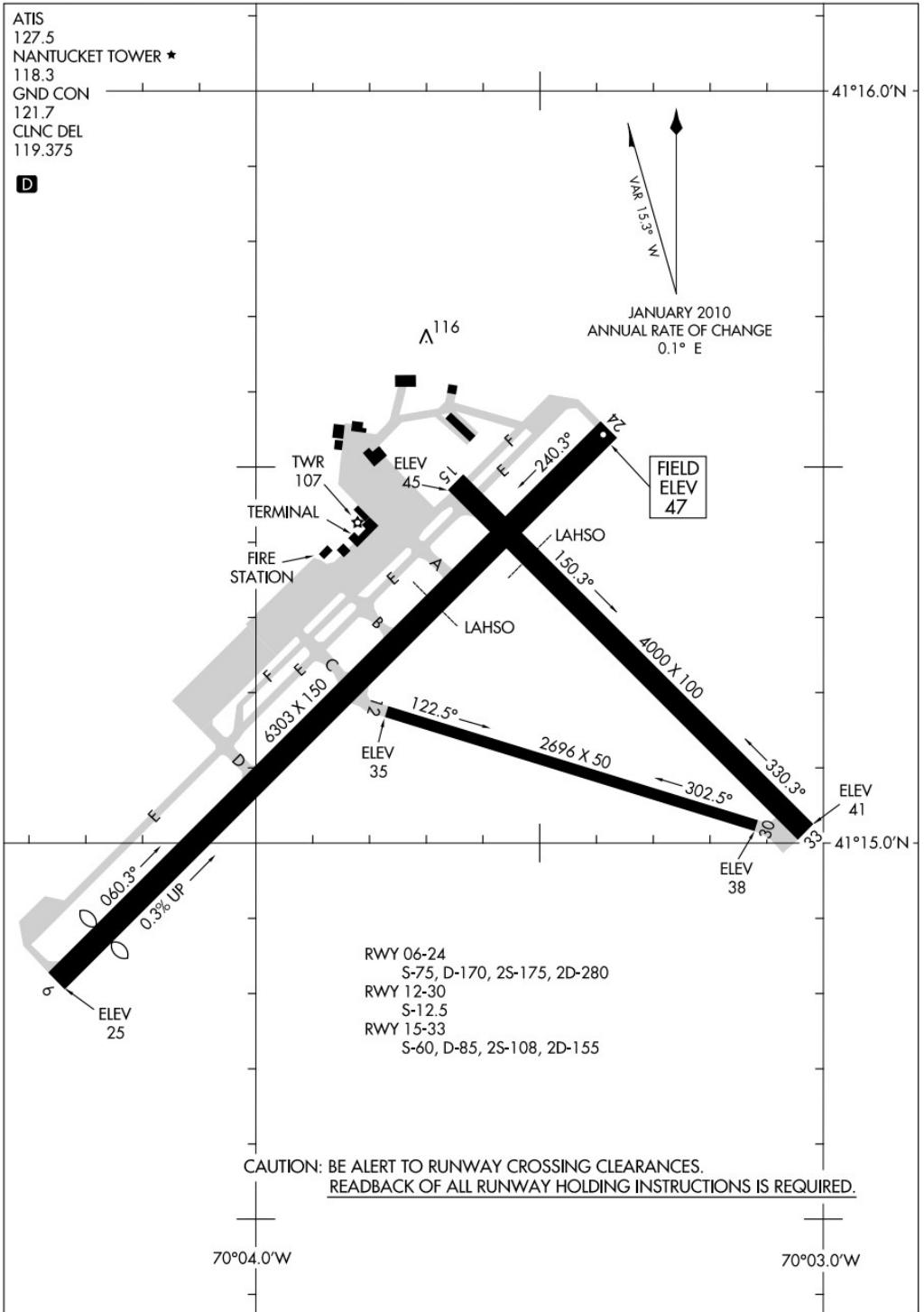
AIRPORT DIAGRAM

AL-659 (FAA)

NANTUCKET MEMORIAL (ACK)
NANTUCKET, MASSACHUSETTS

ATIS
127.5
NANTUCKET TOWER ★
118.3
GND CON
121.7
CLNC DEL
119.375

D

**AIRPORT DIAGRAM**

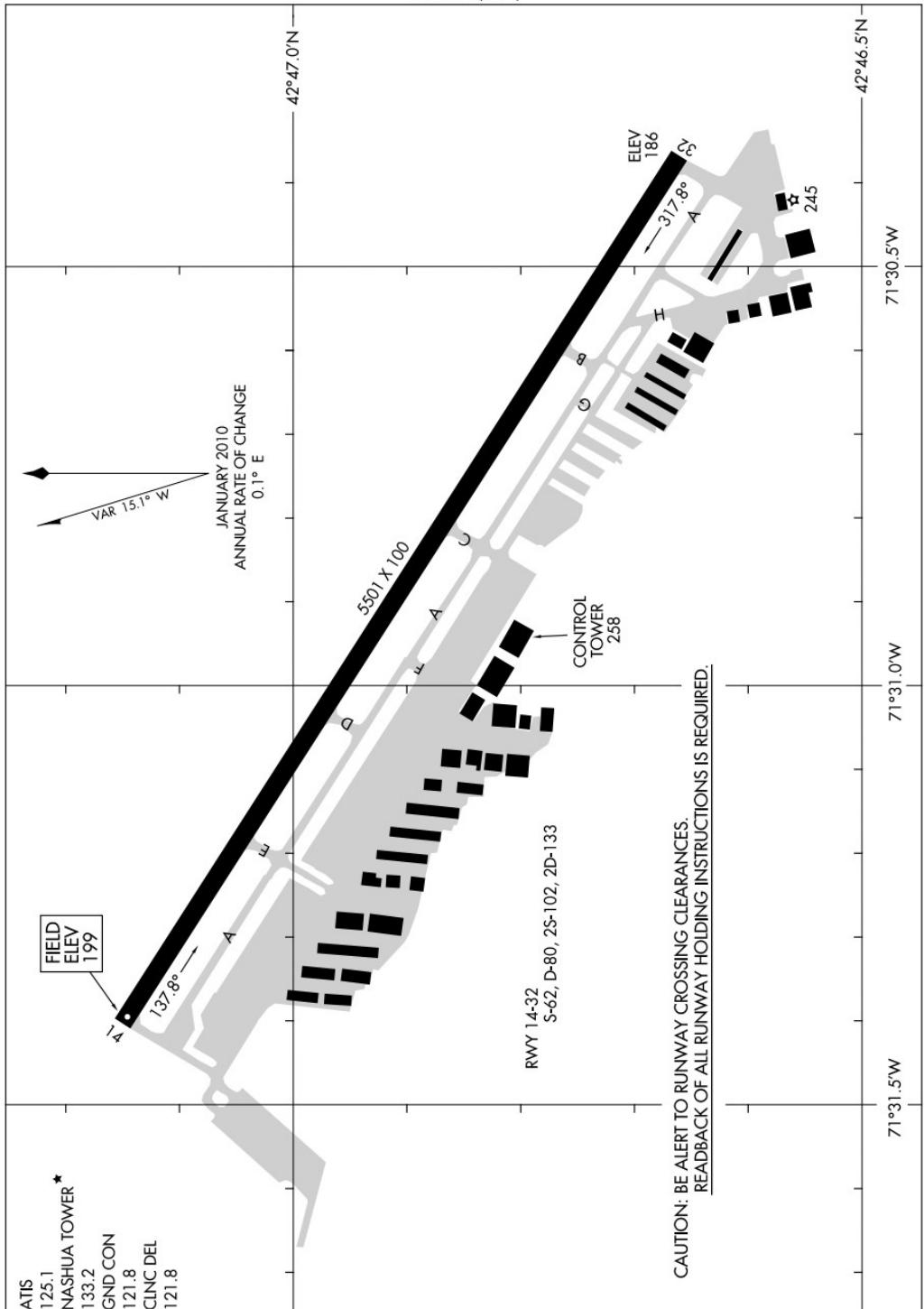
10210

NANTUCKET, MASSACHUSETTS
NANTUCKET MEMORIAL (ACK)

10210

AIRPORT DIAGRAM

AI-5036 (FAA)

NASHUA / BOIRE FIELD (ASH)
NASHUA, NEW HAMPSHIRE

10210

AIRPORT DIAGRAM

NASHUA, NEW HAMPSHIRE
NASHUA / BOIRE FIELD (ASH)

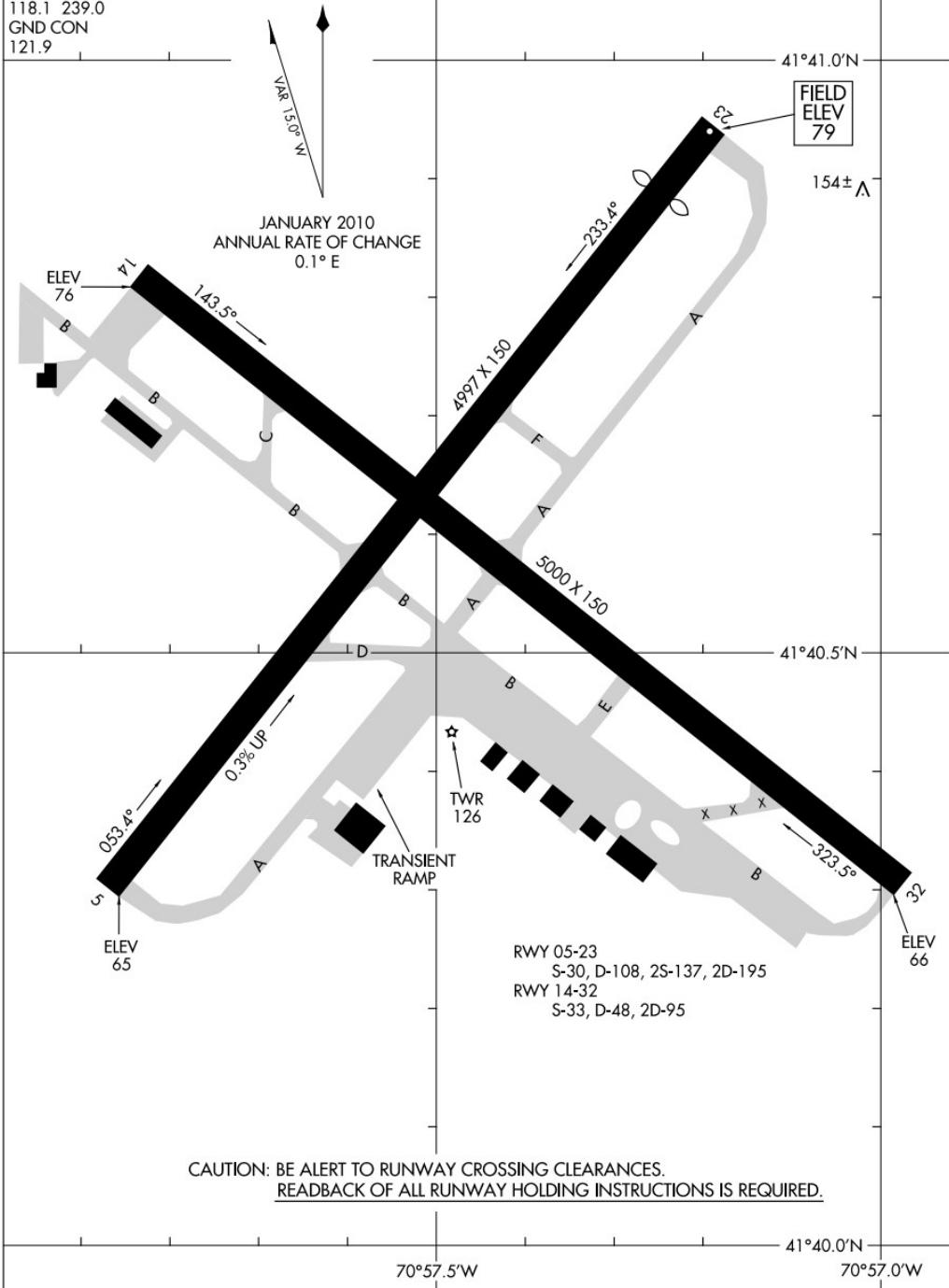
10210

AIRPORT DIAGRAM

AL-644 (FAA)

NEW BEDFORD RGNL (EWB)
NEW BEDFORD, MASSACHUSETTS

ATIS
126.85
NEW BEDFORD TOWER★
118.1 239.0
GND CON
121.9



AIRPORT DIAGRAM

10210

NEW BEDFORD, MASSACHUSETTS
NEW BEDFORD RGNL (EWB)

AIRPORT DIAGRAM

10210

AIRPORT DIAGRAM

AI-671 (FAA)

NEW HAVEN/TWEED-NEW HAVEN (HVN)
NEW HAVEN, CONNECTICUT

ATIS
133.65
NEW HAVEN TOWER ★
124.8
GND CON
121.7

D

$\Delta 185 \pm$

FIELD
ELEV
12

TERMINAL

WEST
RAMP

522 X 100
 145.1°

ELEV
5

GENERAL
AVIATION
PARKING

EAST
RAMP

TWR
91 ★

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E

41° 16.0' N

RWY 02-20
S-110, D-160, 2S-175
RWY 14-32
S-30, D-60

5000 X 150

3626 X 100
 325.1°

ELEV
5

B

B

B

B

B

B

B

B

B

B

ELEV
6

ELEV
2

016.8°

72° 53.0' W

72° 53.5' W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING
INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

10210

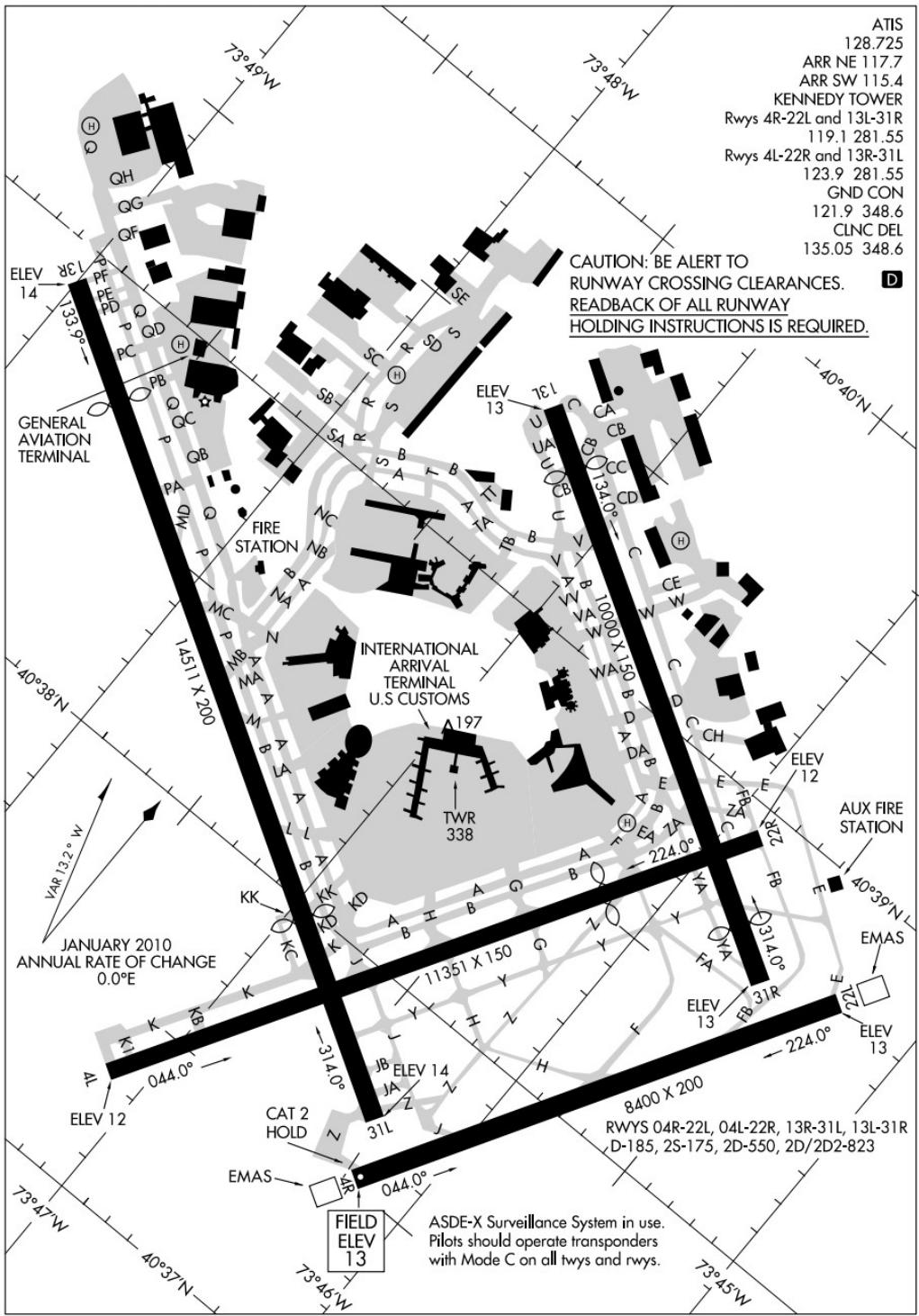
NEW HAVEN, CONNECTICUT

NEW HAVEN/TWEED-NEW HAVEN (HVN)

10210

AIRPORT DIAGRAM

AL-610 (FAA)

NEW YORK / JOHN F. KENNEDY INTL (JFK)
NEW YORK, NEW YORK

AIRPORT DIAGRAM

10210

NEW YORK, NEW YORK

NEW YORK / JOHN F. KENNEDY INTL (JFK)

AIRPORT DIAGRAMS

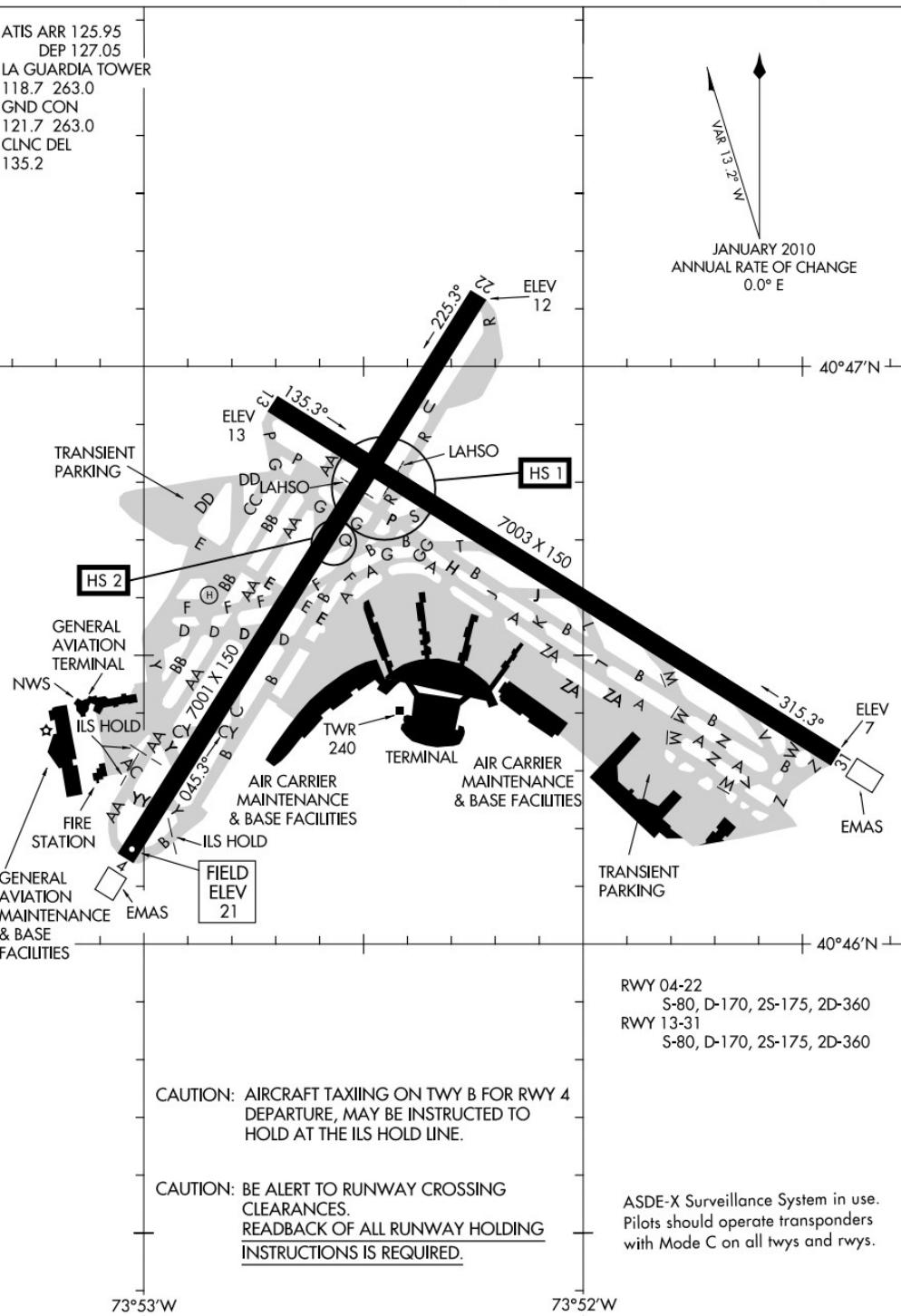
10266

AIRPORT DIAGRAM

AL-289 (FAA)

NEW YORK/LA GUARDIA (LGA)
NEW YORK, NEW YORK

ATIS ARR 125.95
DEP 127.05
LA GUARDIA TOWER
118.7 263.0
GND CON
121.7 263.0
CLNC DEL
135.2



AIRPORT DIAGRAM

10266

NEW YORK, NEW YORK
NEW YORK/LA GUARDIA (LGA)

10210

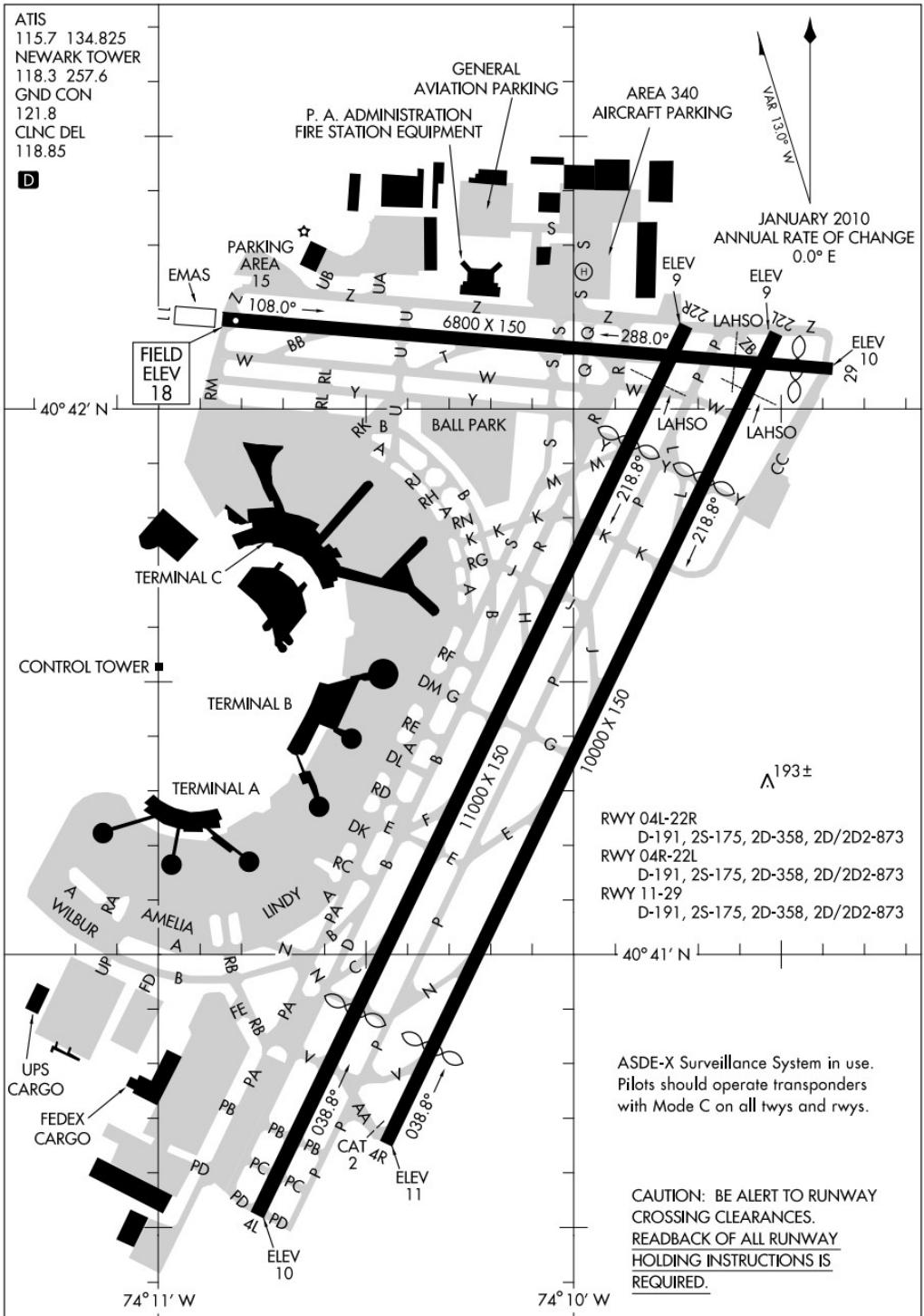
AIRPORT DIAGRAM

AL-285 (FAA)

NEWARK LIBERTY INTL (EWR)
NEWARK, NEW JERSEY

ATIS
115.7 134.825
NEWARK TOWER
118.3 257.6
GND CON
121.8
CLNC DEL
118.85

D



AIRPORT DIAGRAM

10210

NEWARK, NEW JERSEY

NEWARK LIBERTY INTL (EWR)

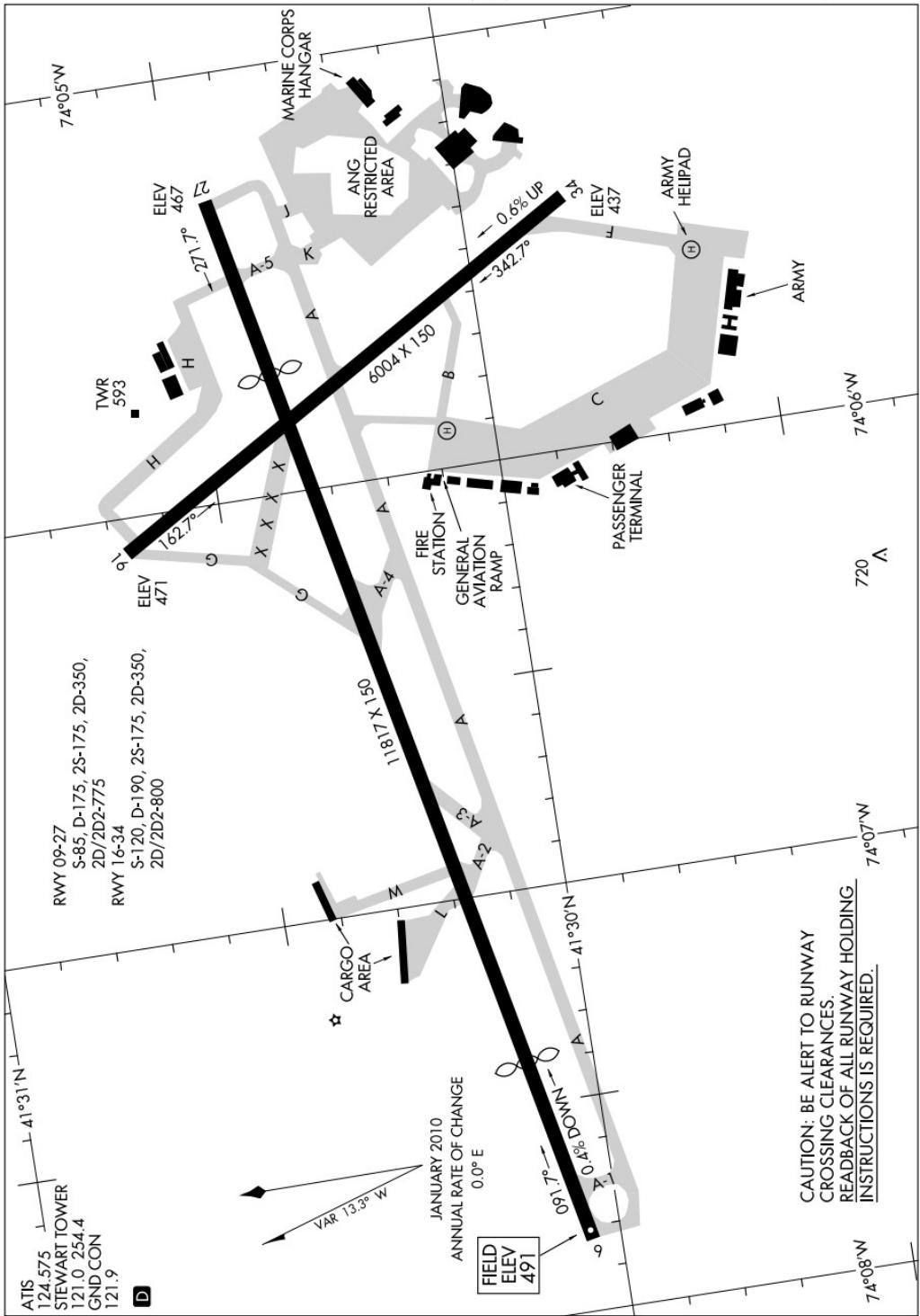
606

AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

AL-450 (FAA)

NEWBURGH/ STEWART INTL (SWF)
NEWBURGH, NEW YORK

AIRPORT DIAGRAM

10210

NEWBURGH, NEW YORK
NEWBURGH/ STEWART INTL (SWF)

NE. 23 SEP 2010 to 18 NOV 2010

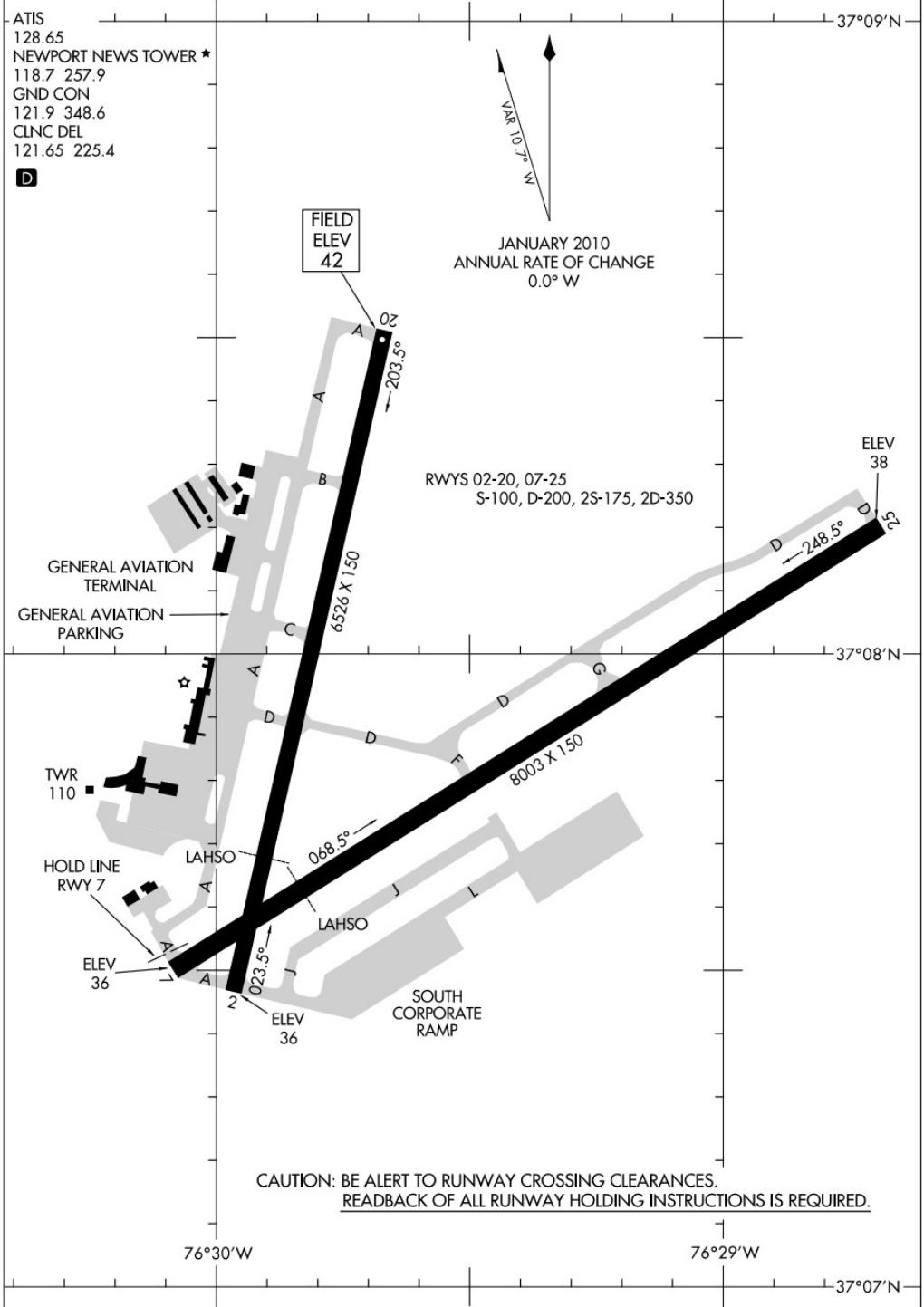
10266

AIRPORT DIAGRAM

AI-957 (FAA)

NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

NEWPORT NEWS, VIRGINIA



10266

AIRPORT DIAGRAM

NEWPORT NEWS, VIRGINIA

NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

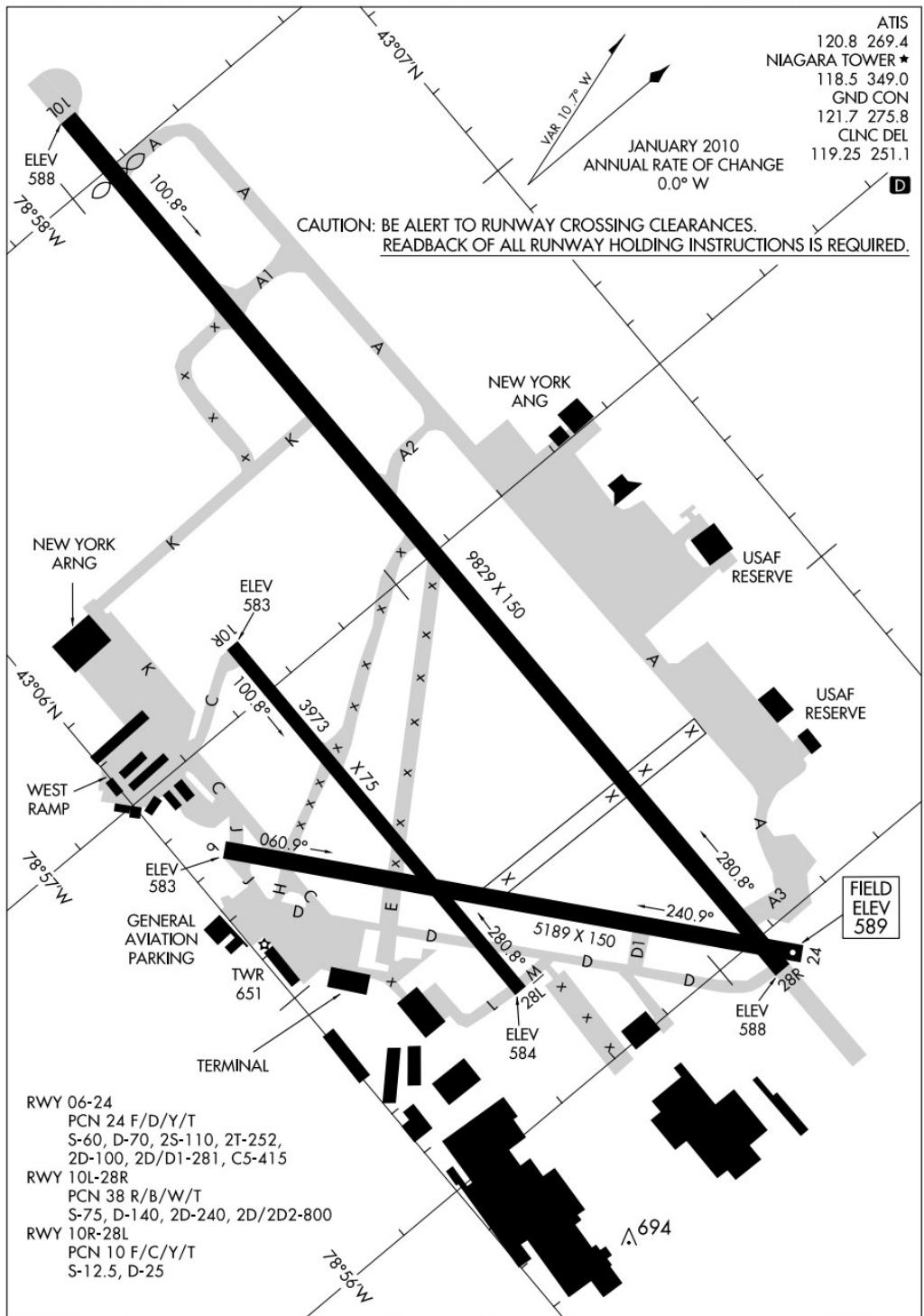
NE. 23 SEP 2010 to 18 NOV 2010

AIRPORT DIAGRAMS

10266

AIRPORT DIAGRAM

AL-614 (FAA)

NIAGARA FALLS INTL (IAG)
NIAGARA FALLS, NEW YORK

AIRPORT DIAGRAM

10266

NIAGARA FALLS, NEW YORK
NIAGARA FALLS INTL (IAG)

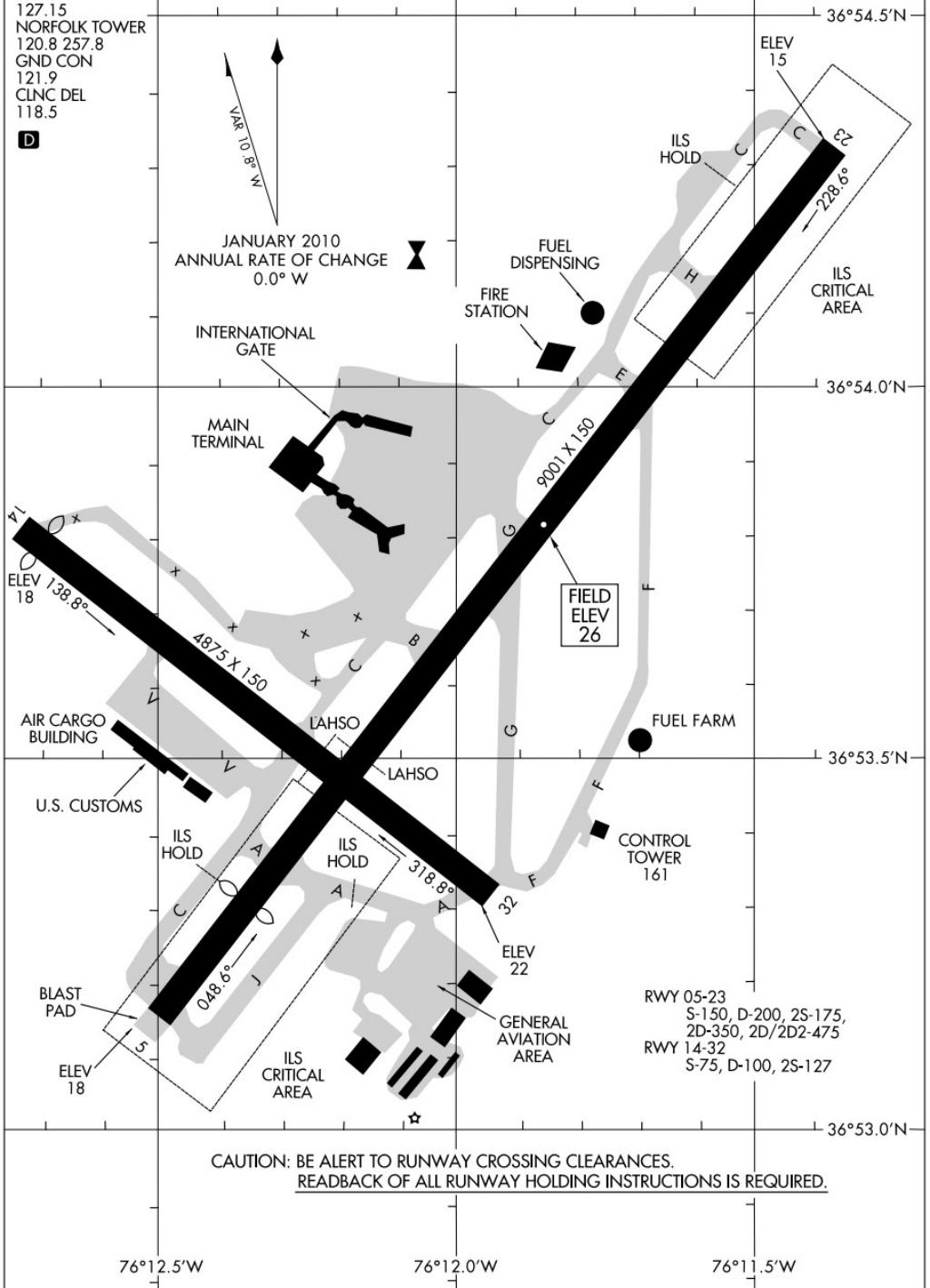
10210

AIRPORT DIAGRAM

AL-291 (FAA)

NORFOLK INTL (ORF)
NORFOLK, VIRGINIA

ATIS
127.15
NORFOLK TOWER
120.8 257.8
GND CON
121.9
CLNC DEL
118.5

D

AIRPORT DIAGRAM

10210

NORFOLK, VIRGINIA
NORFOLK INTL (ORF)

09351

AIRPORT DIAGRAM

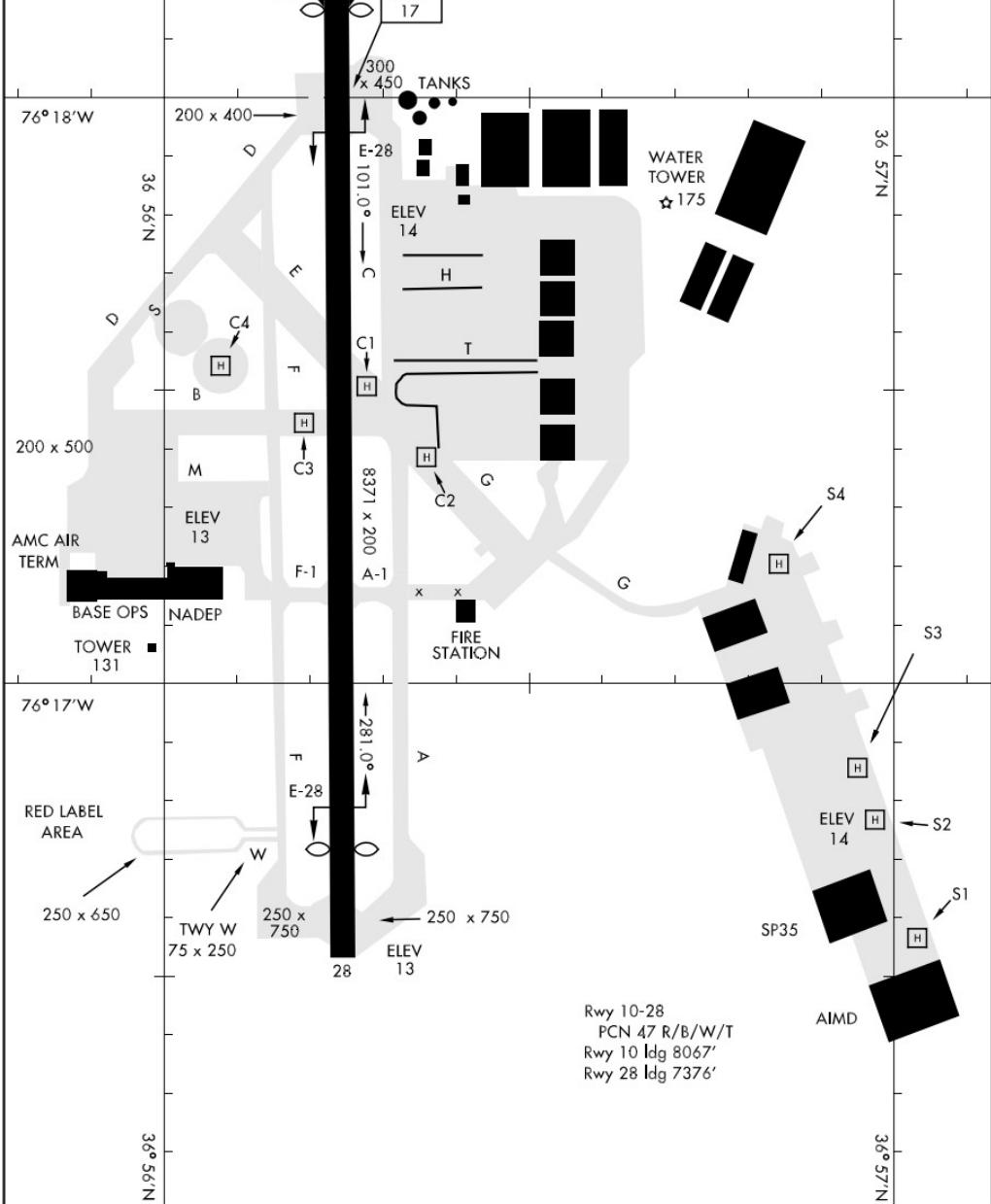
ADF-290 [USN]

NORFOLK NS (CHAMBERS FIELD) (KNGU)

NORFOLK, VIRGINIA

ATIS
118.425 342.0
CHAMBERS TOWER
124.3 379.15
GND CON
121.8 370.85
CLNC DEL
120.7 348.0

DECEMBER 2009
ANNUAL RATE OF CHANGE
0.0°W



AIRPORT DIAGRAM

NORFOLK, VIRGINIA
NORFOLK NS (CHAMBERS FIELD) (KNGU)

10210

AIRPORT DIAGRAM

AI-338 (FAA)

NORTH KINGSTOWN/QUONSET STATE (OQU)
NORTH KINGSTOWN, RHODE ISLAND

**CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.**

ATIS★
118.6
TOWER★
5 252.9
ND CON
5 275.8

QUONSET TOWER ★
126.35 252.9
GND CON
134.5 275.8

JANUARY 2010
ANNUAL RATE OF CHANGE
-0.185

RWY 05-23
S-12.5
RWY 16-34
D-175, 2S-175

RHODE ISLAND
AIR NATIONAL GUARD

RHODE ISLAND
ARMY RESERVE

CONTRO

GENERAL INTRODUCTION

A
166

71°25'0''W

71°24.5'W

AIRPORT DIAGRAM

NORTH KINGSTOWN, RHODE ISLAND
NORTH KINGSTOWN/QUONSET STATE (OQJU)

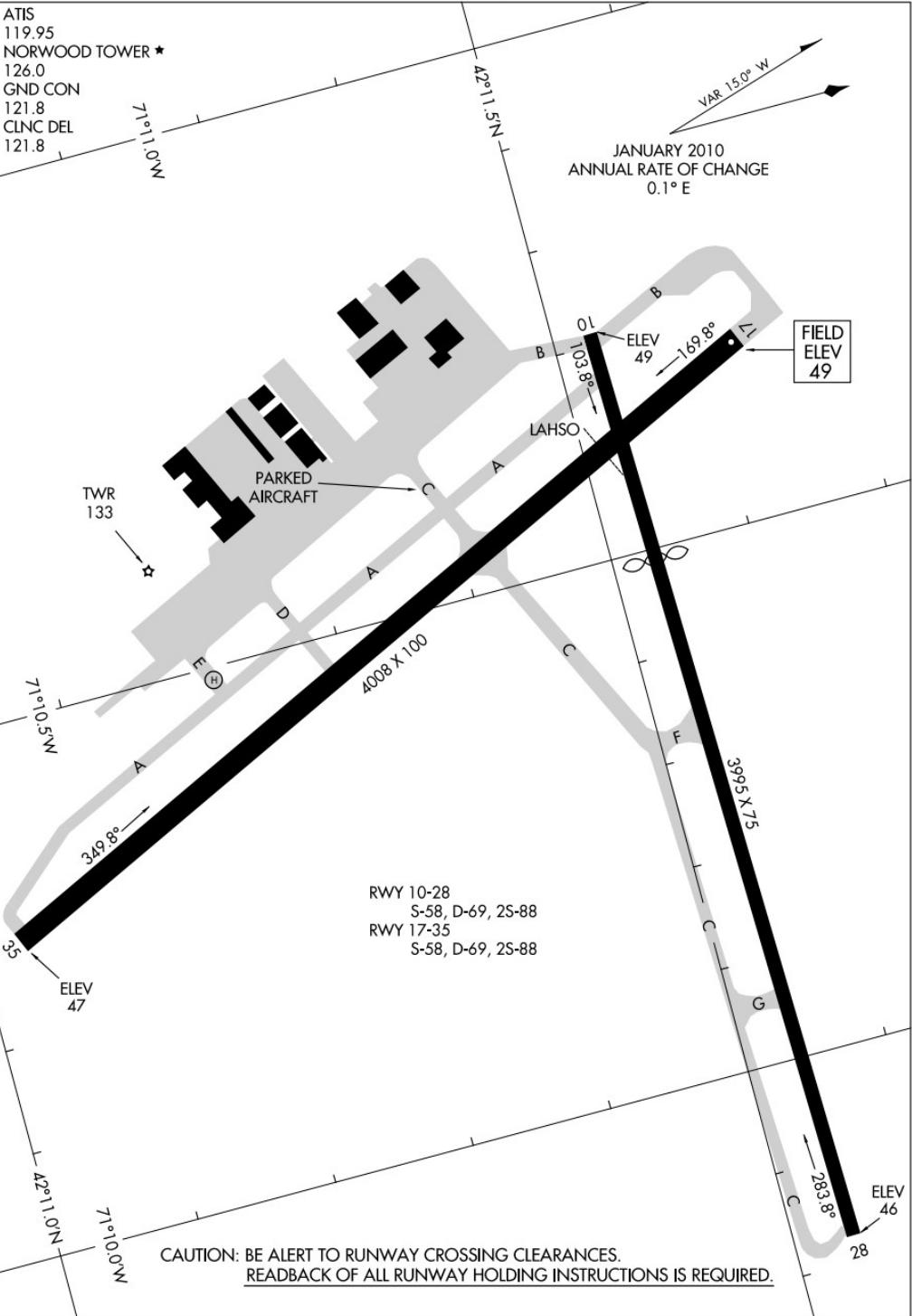
10266

AIRPORT DIAGRAM

AL-725 (FAA)

NORWOOD MEMORIAL (OWD)
NORWOOD, MASSACHUSETTS

ATIS
119.95
NORWOOD TOWER ★
126.0
GND CON
121.8
CLNC DEL
121.8



AIRPORT DIAGRAM

10266

NORWOOD, MASSACHUSETTS
NORWOOD MEMORIAL (OWD)

10210

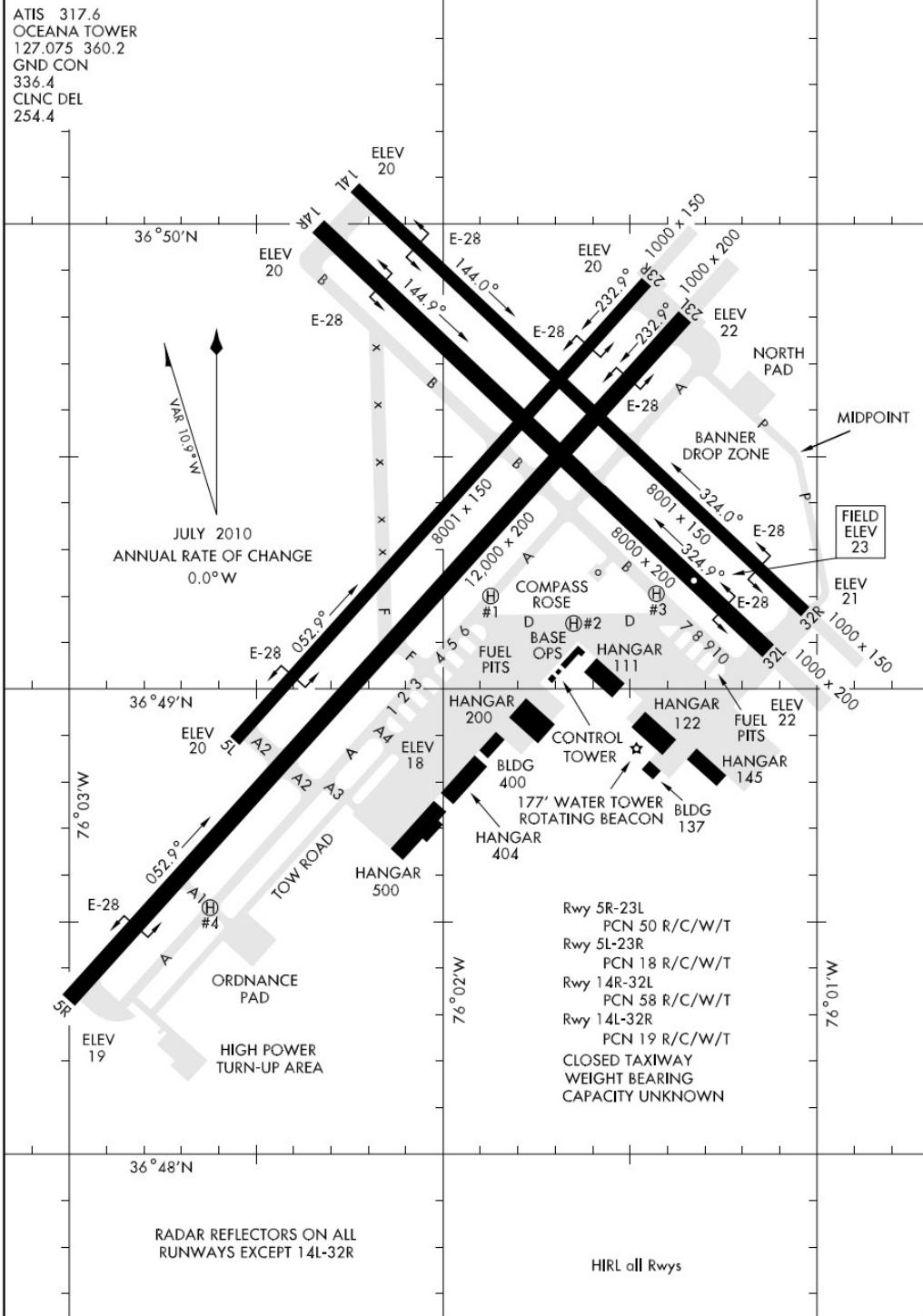
AIRPORT DIAGRAM

OCEANA NAS (APOLLO SQUEEK FIELD) (KNTU)

AFD-934 [USN]

VIRGINIA BEACH, VIRGINIA

ATIS 317.6
OCEANA TOWER
127.075 360.2
GND CON
336.4
CLNC DEL
254.4



AIRPORT DIAGRAM

VIRGINIA BEACH, VIRGINIA
OCEANA NAS (APOLLO SOURCEK FIELD) (KNTU)

614

AIRPORT DIAGRAMS

10210

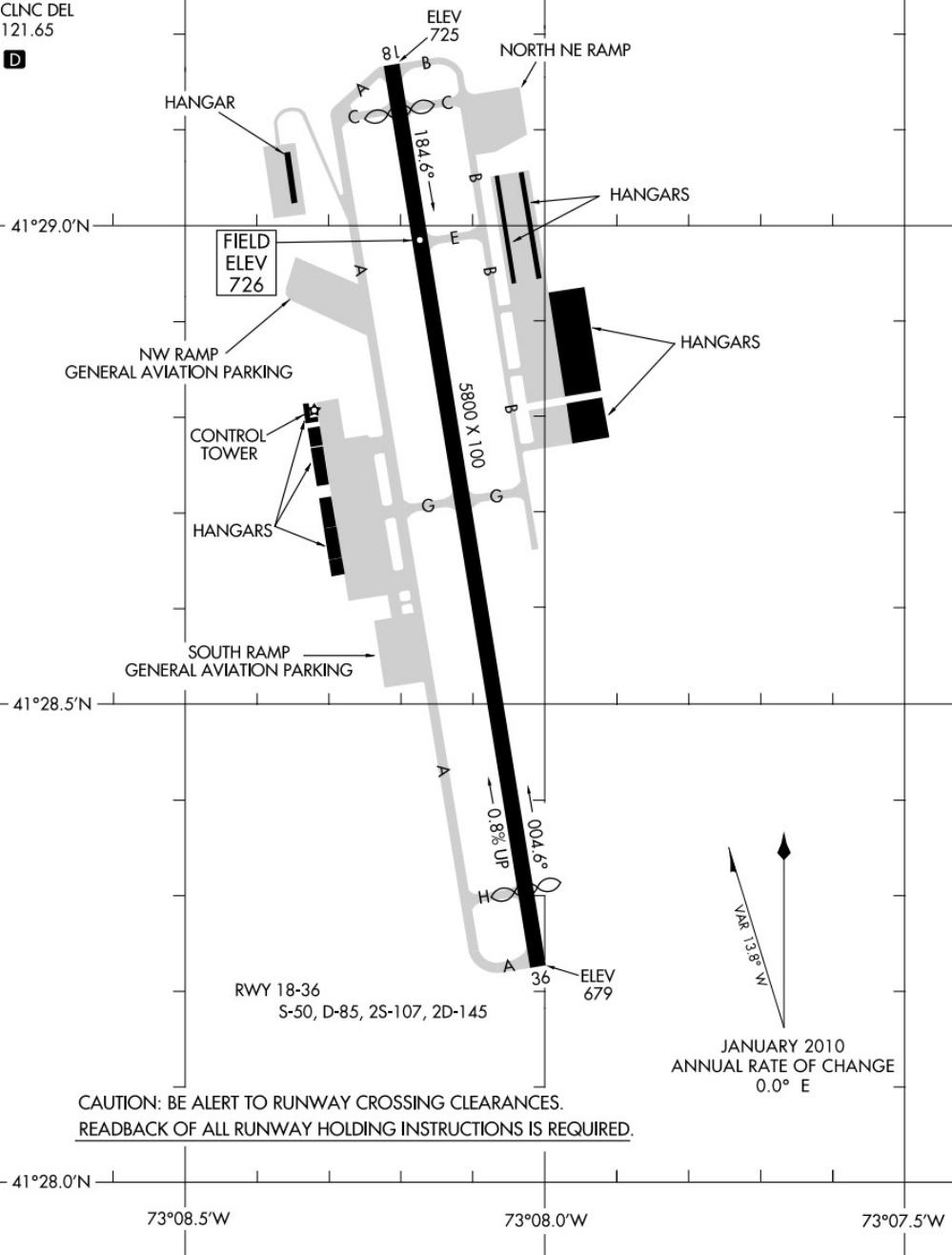
AIRPORT DIAGRAM

AL-5785 (FAA)

OXFORD/ WATERBURY-OXFORD (OXC)
OXFORD, CONNECTICUT

ATIS
132.975
OXFORD TOWER★
118.475
GND CON
121.65
CLNC DEL
121.65

D



AIRPORT DIAGRAM

10210

OXFORD, CONNECTICUT
OXFORD/WATERBURY-OXFORD (OXC)

NE. 23 SEP 2010 to 18 NOV 2010

10210

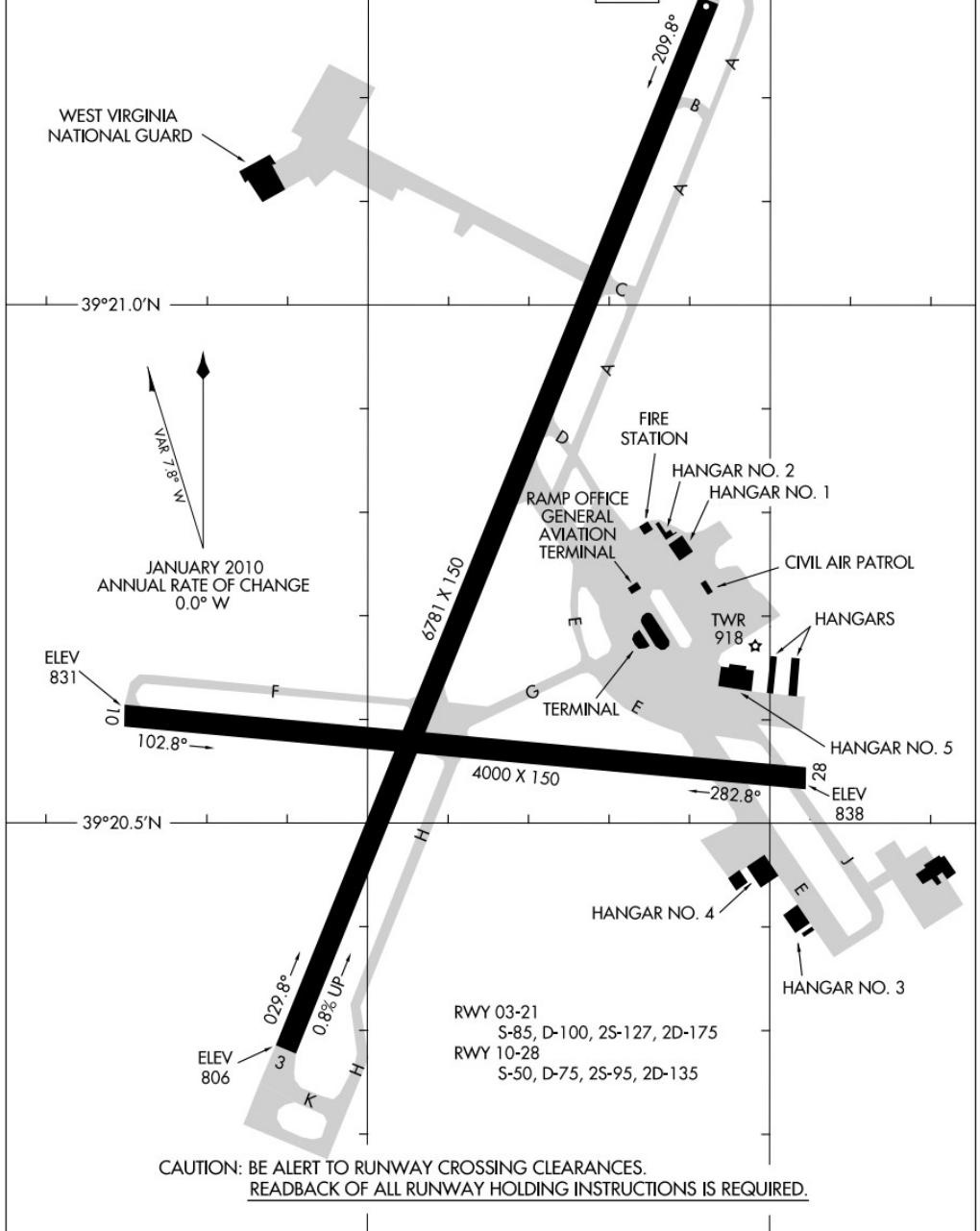
AIRPORT DIAGRAM

AL-646 (FAA)

PARKERSBURG/MID-OHIO VALLEY RGNL (PKB)
PARKERSBURG, WEST VIRGINIA

ATIS
124.35
PARKERSBURG TOWER★
123.7 257.8
GND CON
121.7

D



AIRPORT DIAGRAM

10210

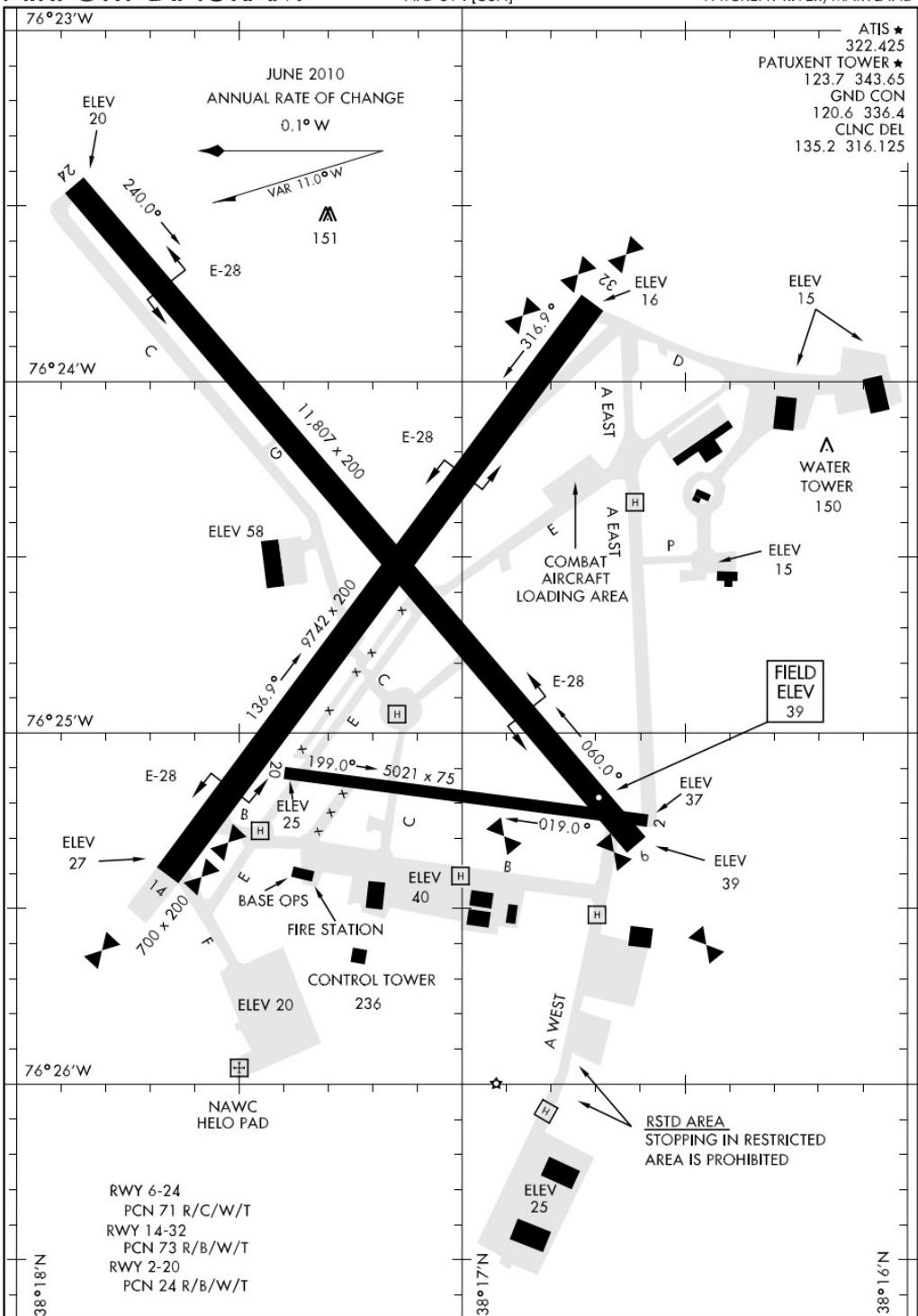
PARKERSBURG, WEST VIRGINIA
PARKERSBURG/MID-OHIO VALLEY RGNL (PKB)

AIRPORT DIAGRAM

AFD-314 [USN]

PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

PATUXENT RIVER, MARYLAND



AIRPORT DIAGRAM

PATUXENT RIVER, MARYLAND

PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

10210

AIRPORT DIAGRAM

PHILADELPHIA / NORTHEAST PHILADELPHIA (PNE)
AL-528 (FAA)

PHILADELPHIA, PENNSYLVANIA

ATIS
121.15
NORTHEAST PHILADELPHIA TOWER *126.9 278.8
GND CON
121.7
CLNC DEL
127.25

40°05.5'N

40°05.0'N

40°04.5'N

75°01.0'W

75°00.5'W

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E

FIELD ELEV 120

7000 X 150

5000 X 150

40°05.0'N

40°04.5'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ATLANTIC

LAHSO

LAHSO

AGUSTA

CONTROL TOWER 197

RWY 06-24
S-60, D-90, 2S-114RWY 15-33
S-40, D-55

JET CENTER

ELEV 114

060.8°

ELEV 111

333.1°

ELEV 108

A-3 A-3

A-2 A-1

A-1 A-1

B A-3

10210

AIRPORT DIAGRAM

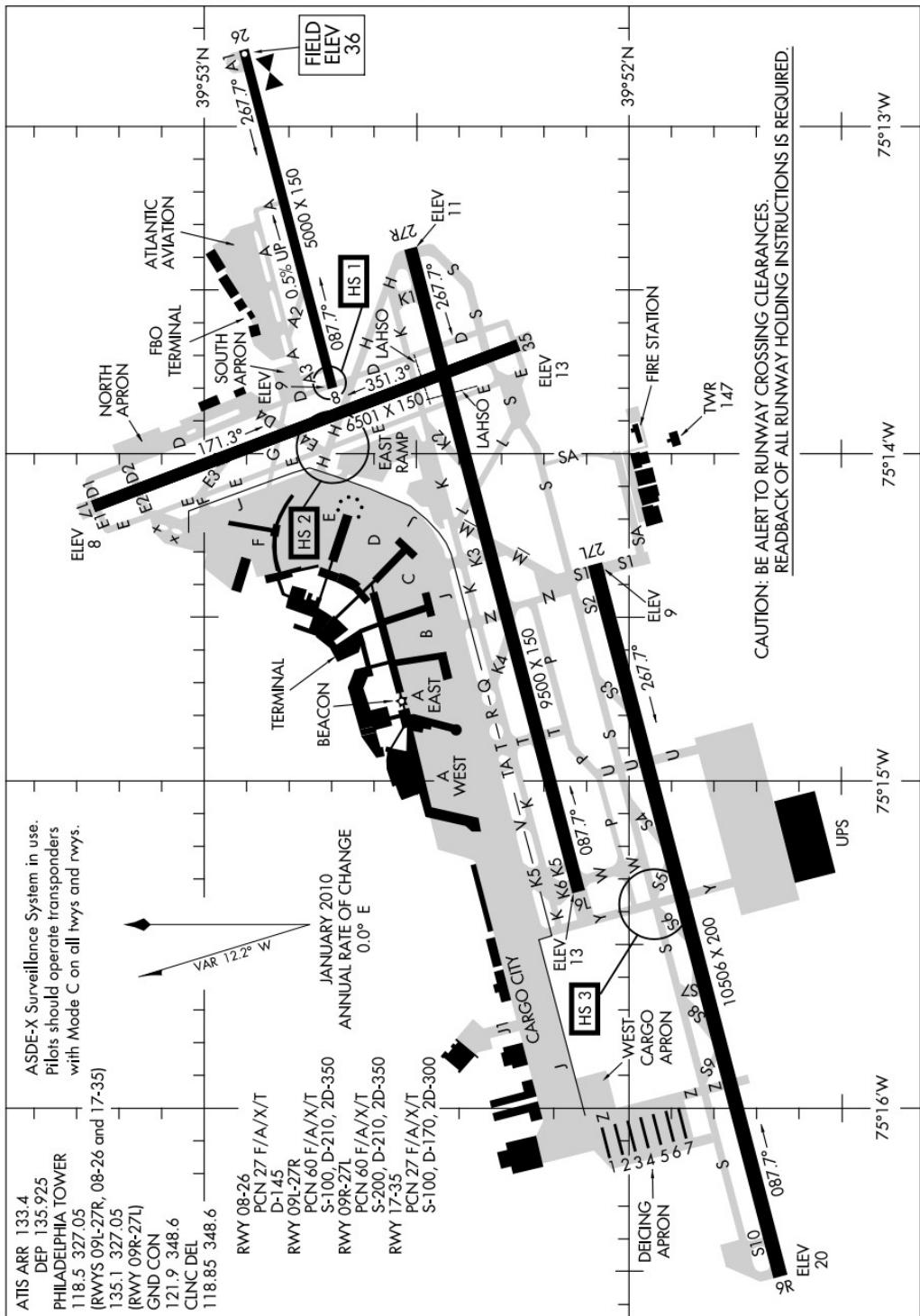
PHILADELPHIA, PENNSYLVANIA
PHILADELPHIA / NORTHEAST PHILADELPHIA (PNE)

NE. 23 SEP 2010 to 18 NOV 2010

AIRPORT DIAGRAM

AL-320 (FAA)

PHILADELPHIA INTL (PHL)
PHILADELPHIA, PENNSYLVANIA



AIRPORT DIAGRAM

10266

PHILADELPHIA, PENNSYLVANIA
PHILADELPHIA INTL (PHL)

10210

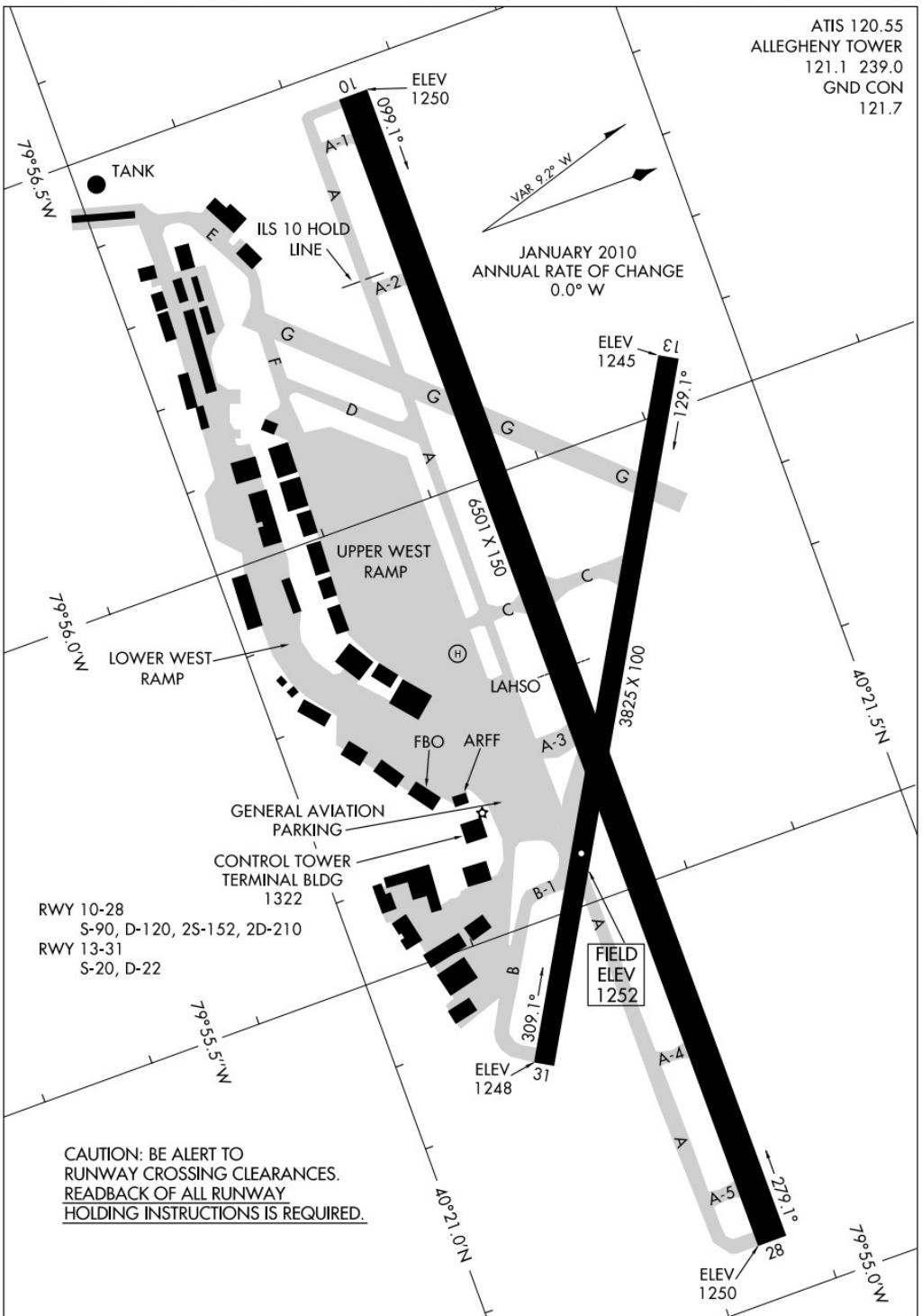
AIRPORT DIAGRAM

AL-326 (FAA)

PITTSBURGH / ALLEGHENY COUNTY (AGC)
PITTSBURGH, PENNSYLVANIA

ATIS 120.55
ALLEGHENY TOWER
121.1 239.0
GND CON
121.7

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W



AIRPORT DIAGRAM

10210

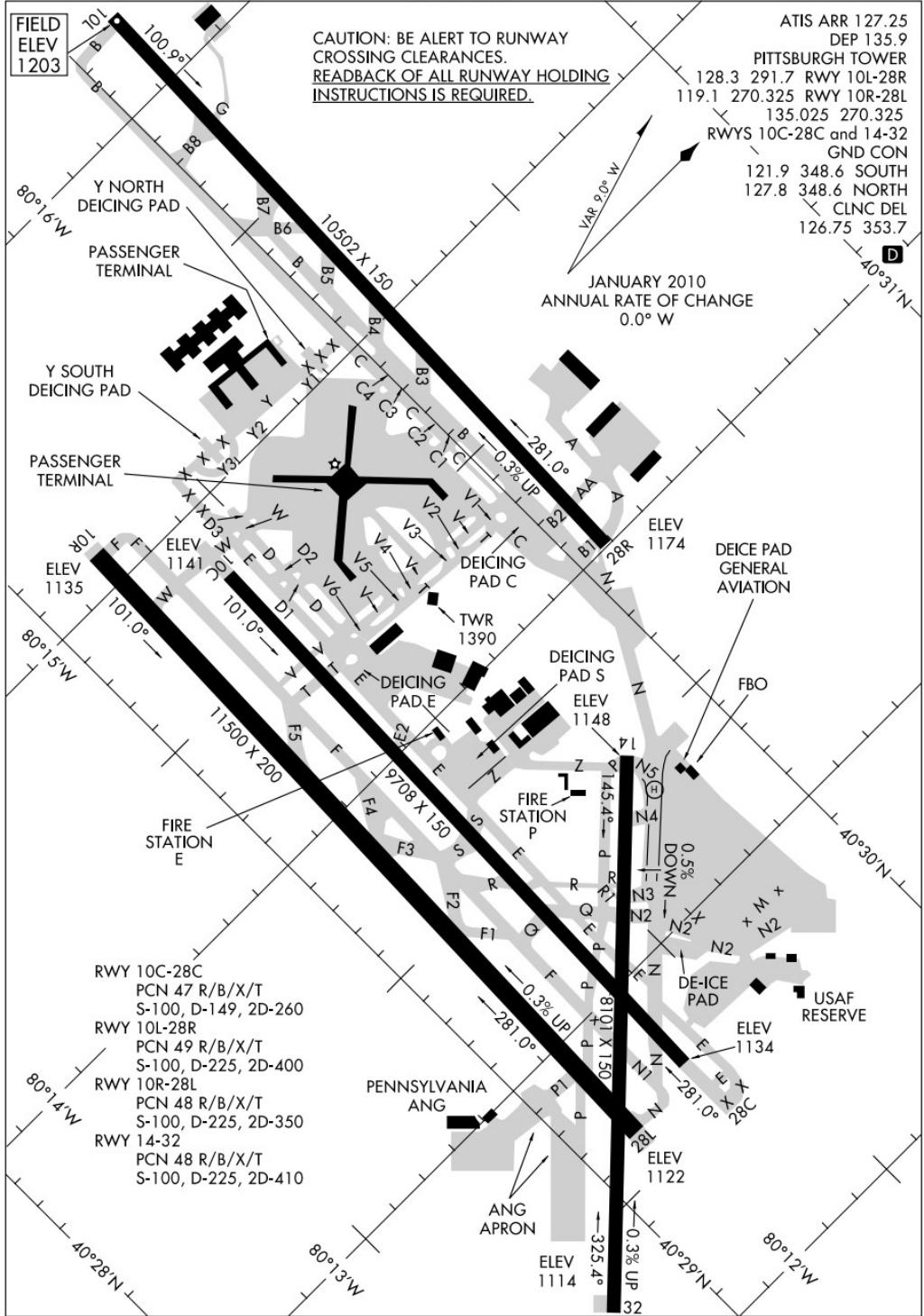
PITTSBURGH, PENNSYLVANIA
PITTSBURGH / ALLEGHENY COUNTY (AGC)

1021C

AIRPORT DIAGRAM

AL-570 (FAA)

PITTSBURGH INT'L (PIT)
PITTSBURGH, PENNSYLVANIA



AIRPORT DIAGRAM

10210

10210

PITTSBURGH, PENNSYLVANIA
PITTSBURGH INTL (PIT)

10266

AIRPORT DIAGRAM

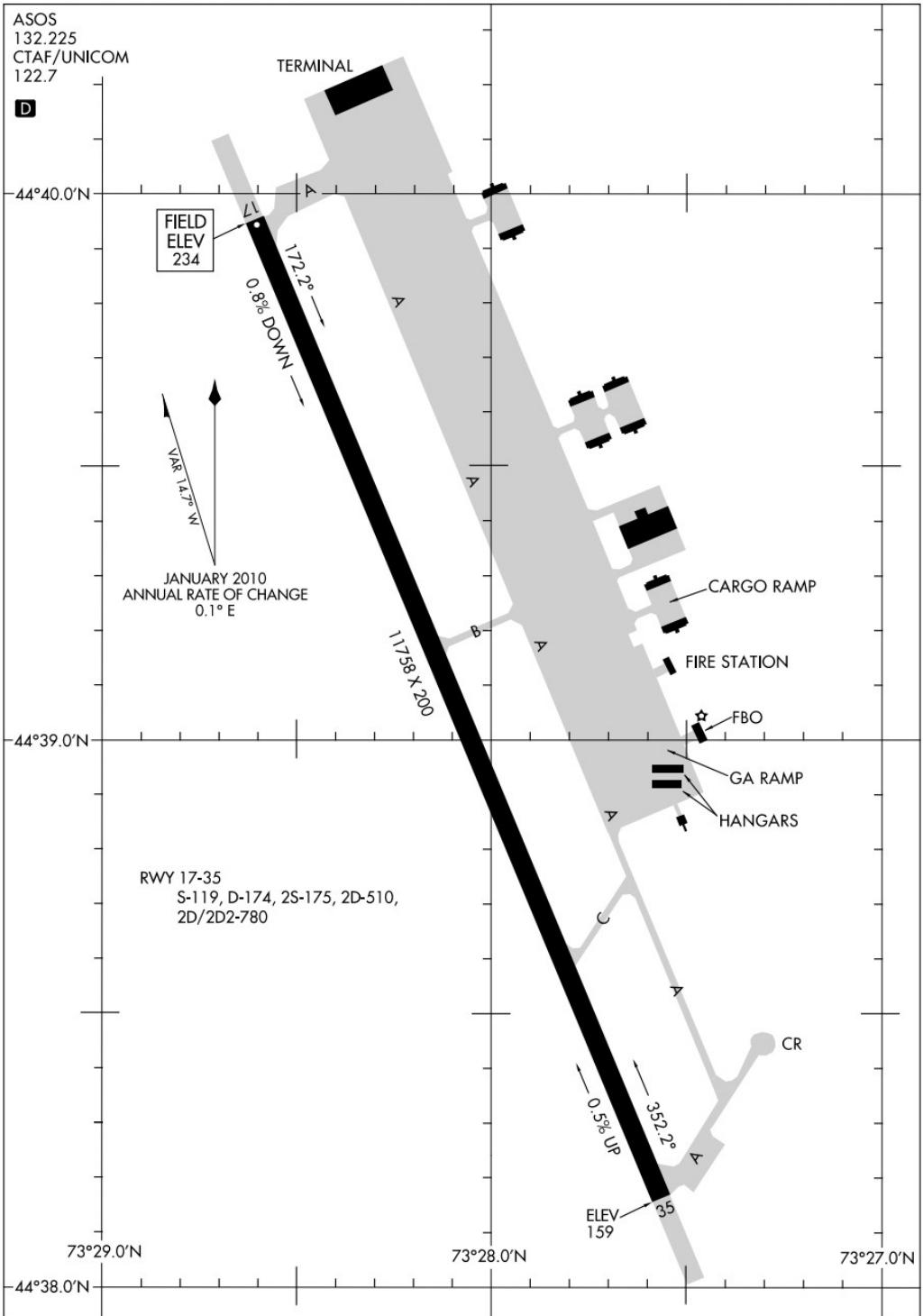
AL-729 (FAA)

PLATTSBURGH INTL (PBG)
PLATTSBURGH, NEW YORK

ASOS
132.225
CTAF/UNICOM
122.7

1

TERMINAL



AIRPORT DIAGRAM

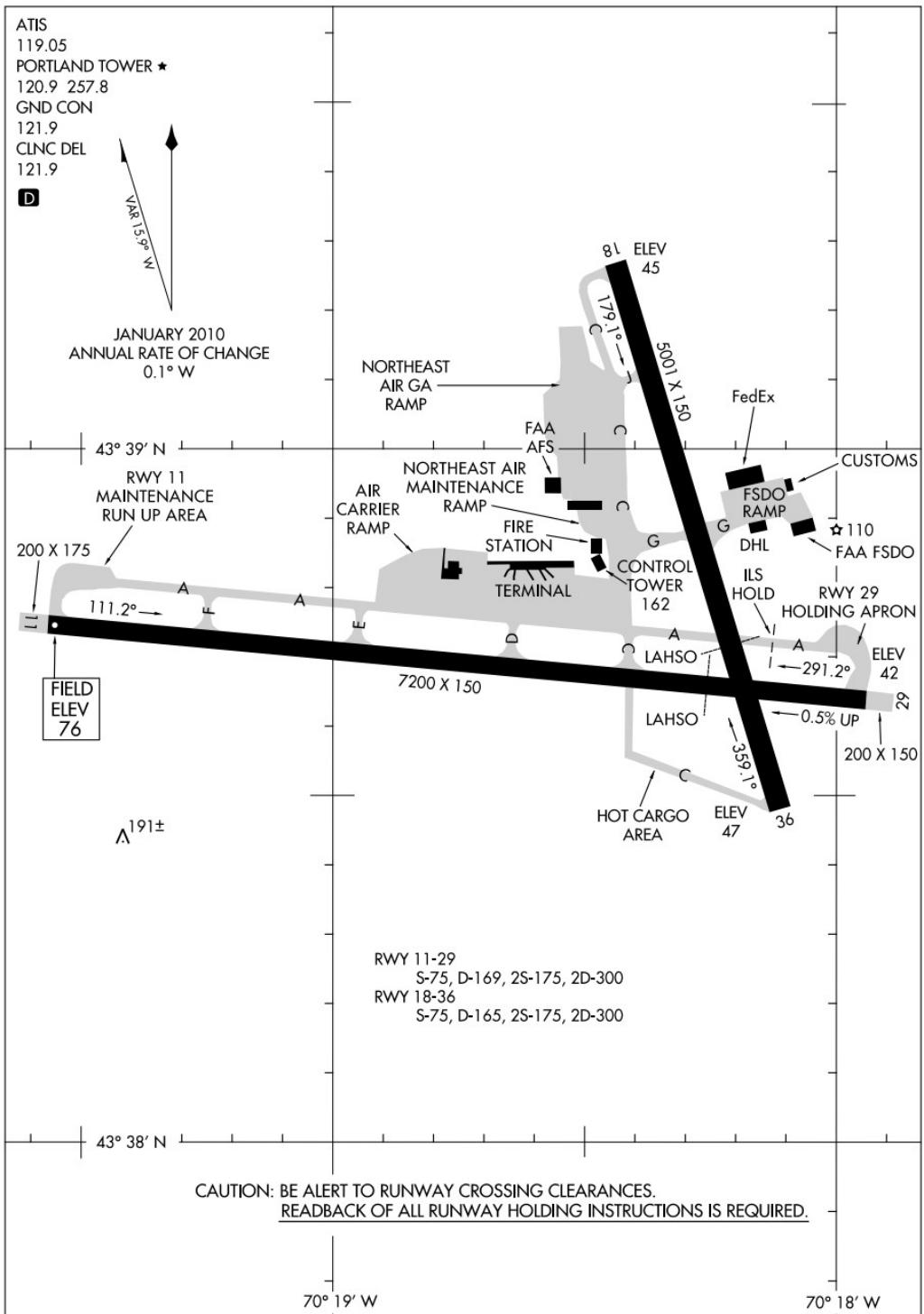
10266

PLATTSBURGH, NEW YORK
PLATTSBURGH INTL (PBG)

NE, 23 SEP 2010 to 18 NOV 2010

AIRPORT DIAGRAM

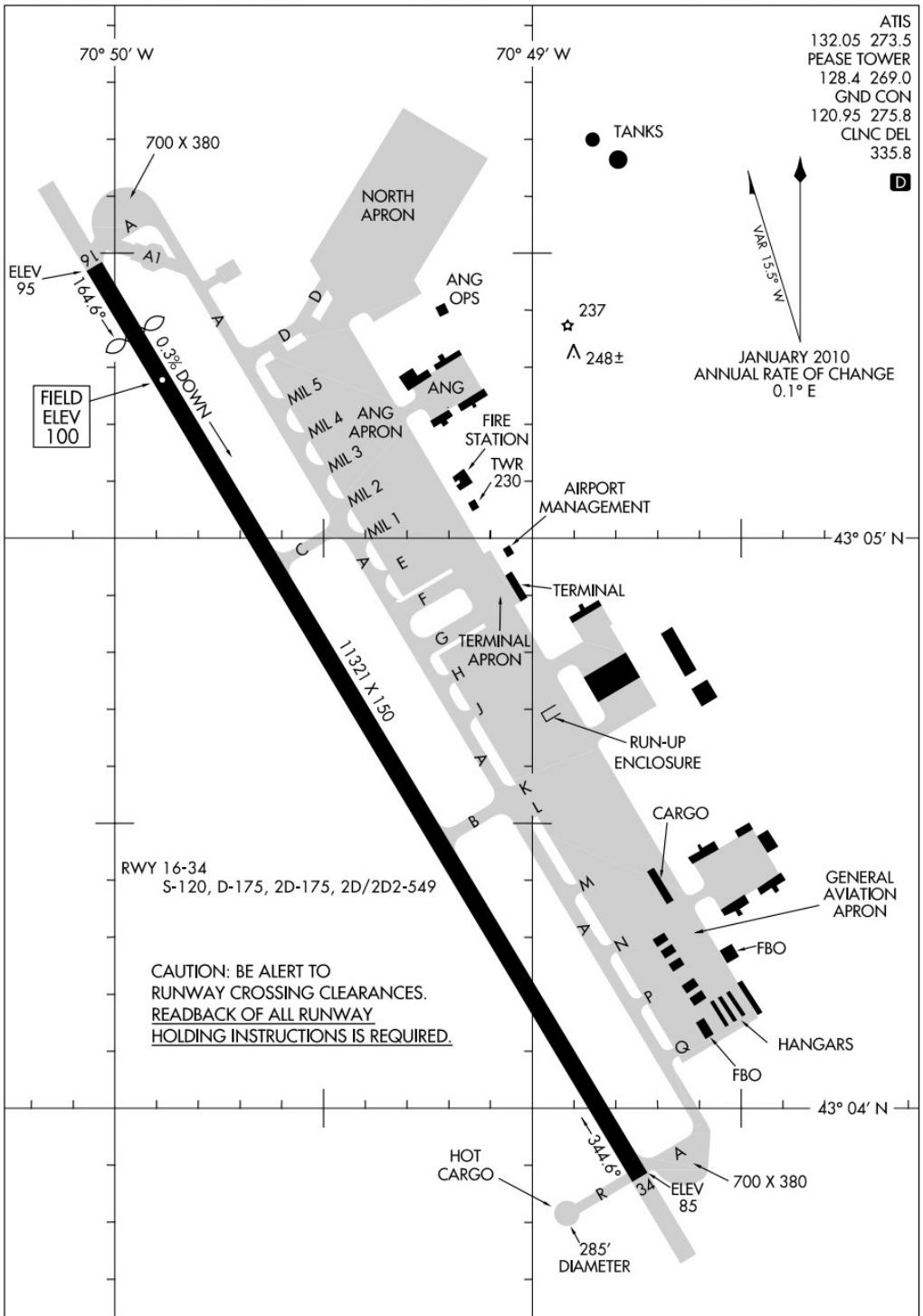
AL-329 (FAA)

PORTLAND INTL JETPORT (PWM)
PORTLAND, MAINEAIRPORT DIAGRAM
10210PORTLAND, MAINE
PORTLAND INTL JETPORT (PWM)

10210

AIRPORT DIAGRAM

AL-678 (FAA)

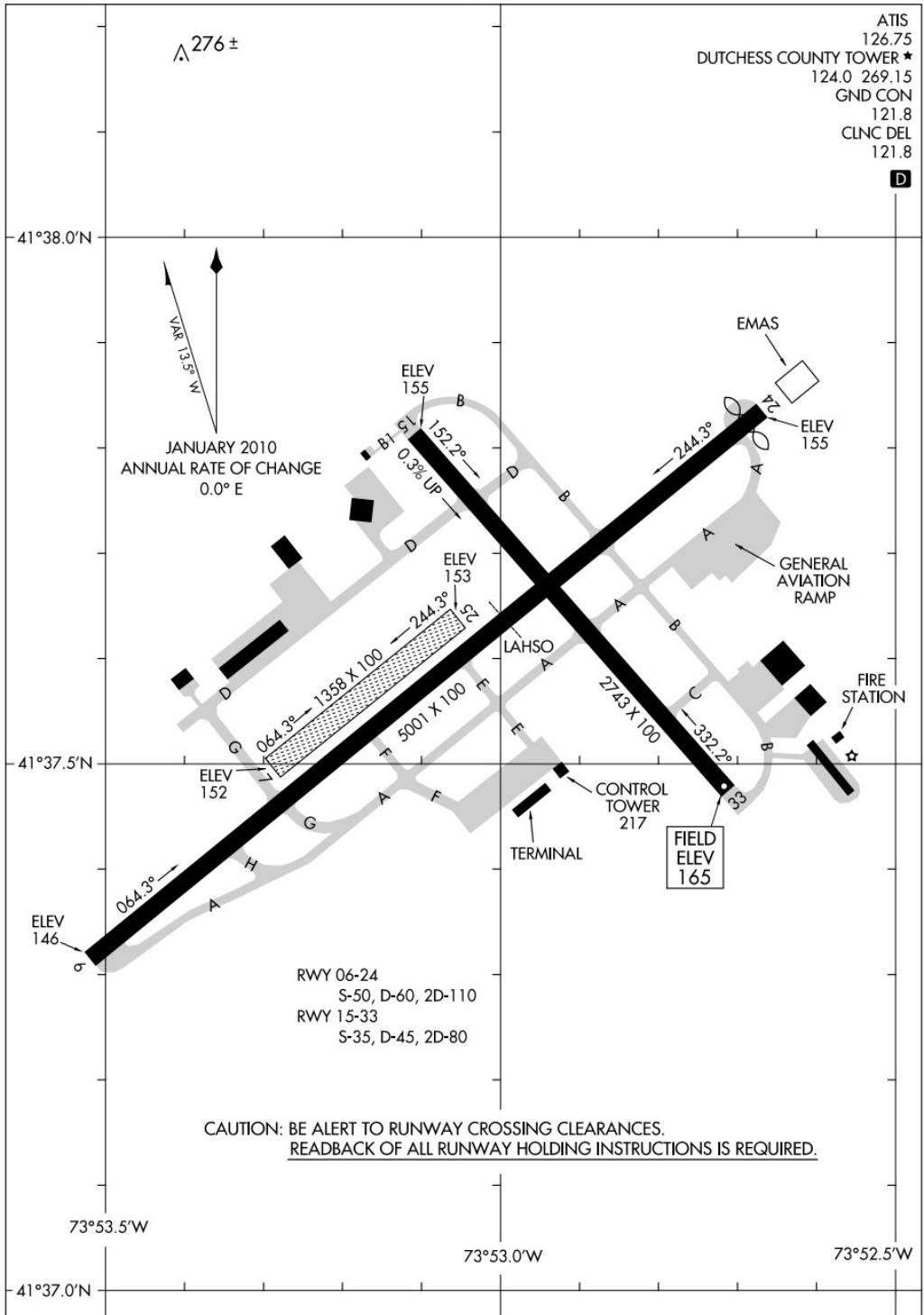
PORTSMOUTH INTL AT PEASE (PSM)
PORTSMOUTH, NEW HAMPSHIREAIRPORT DIAGRAM
10210PORTSMOUTH, NEW HAMPSHIRE
PORTSMOUTH INTL AT PEASE (PSM)

10210

AIRPORT DIAGRAM

AL-286 (FAA)

POUGHKEEPSIE/DUTCHESSE COUNTY (POU)
POUGHKEEPSIE, NEW YORK



AIRPORT DIAGRAM

10210

POUGHKEEPSIE, NEW YORK
POUGHKEEPSIE/DUTCHESS COUNTY (POU)

10266

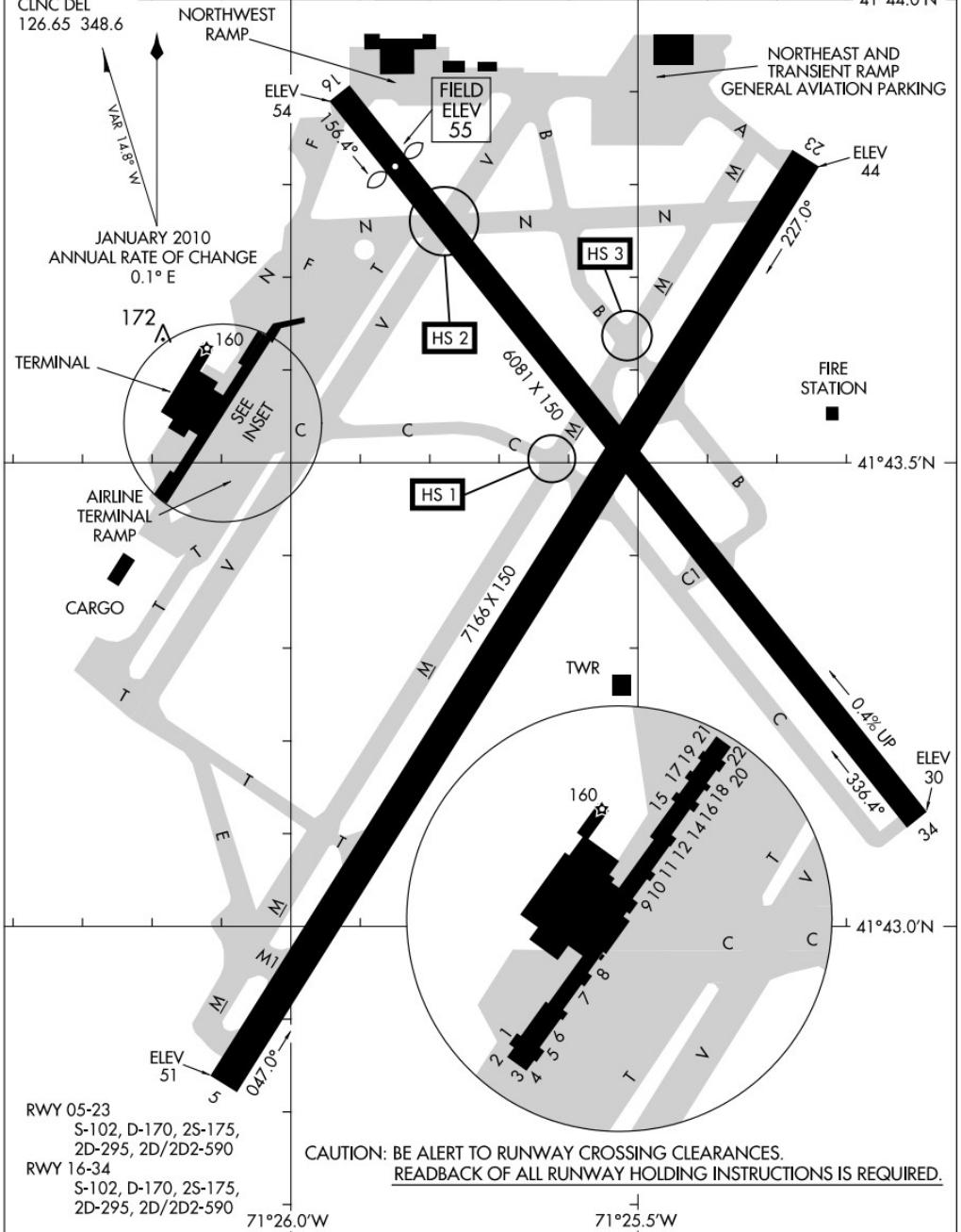
AIRPORT DIAGRAM

PROVIDENCE / THEODORE FRANCIS GREEN STATE (PVD)
AL-333 (FAA)

PROVIDE, RHODE ISLAND

ATIS
124.2
PROVIDENCE TOWER*
120.7 257.8
GND CON
121.9 348.6
CLNC DEL
126.65 348.6

ASDE-X Surveillance System in use.
Pilots should operate transponders
with Mode C on all twys and rwy.



AIRPORT DIAGRAM

10266

PROVIDE, RHODE ISLAND
PROVIDENCE / THEODORE FRANCIS GREEN STATE (PVD)

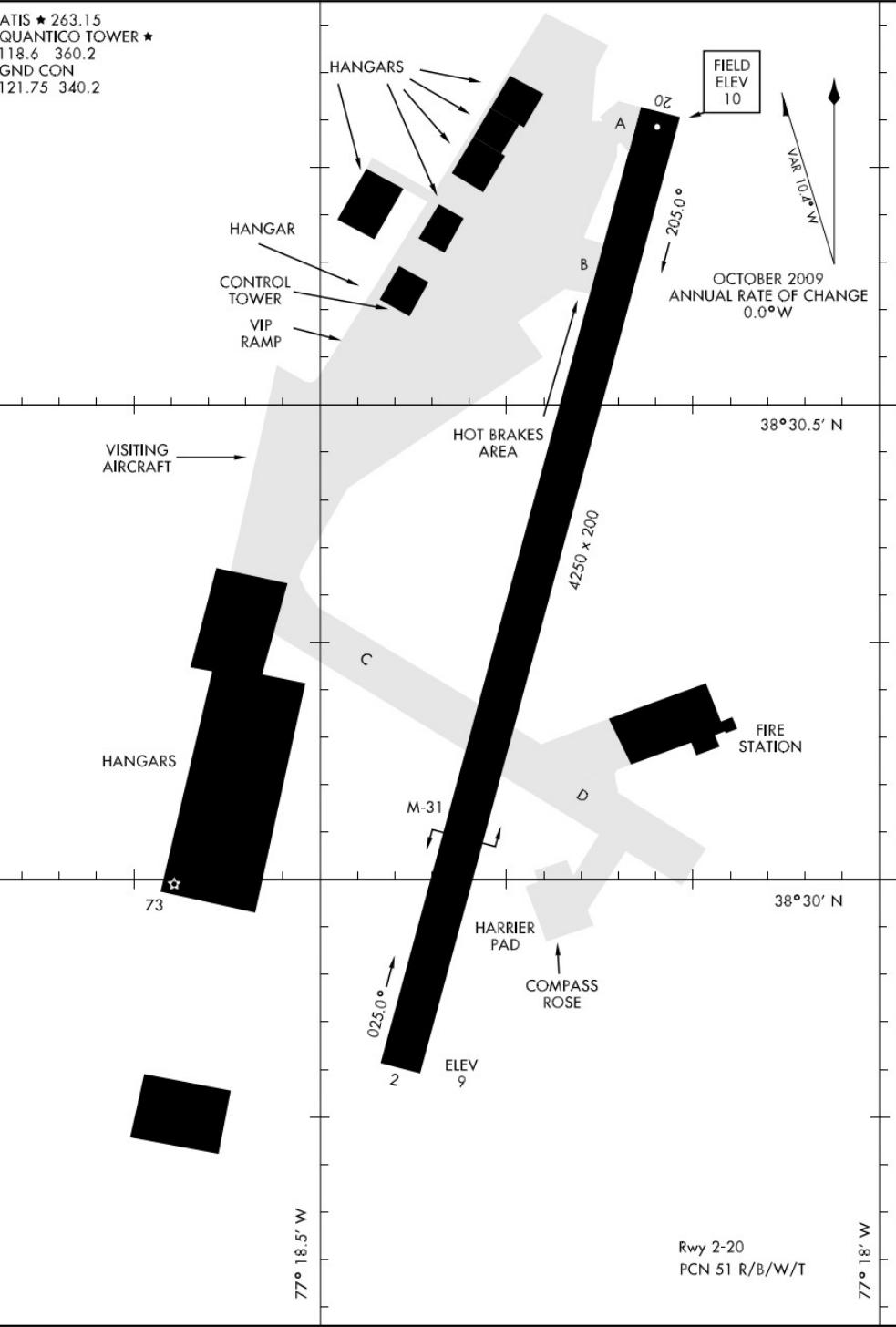
AIRPORT DIAGRAM

AFD-339 [USN]

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VIRGINIA

ATIS ★ 263.15
 QUANTICO TOWER ★
 118.6 360.2
 GND CON
 121.75 340.2



AIRPORT DIAGRAM

QUANTICO, VIRGINIA
 QUANTICO MCAF (TURNER FIELD) (KNYG)

10210

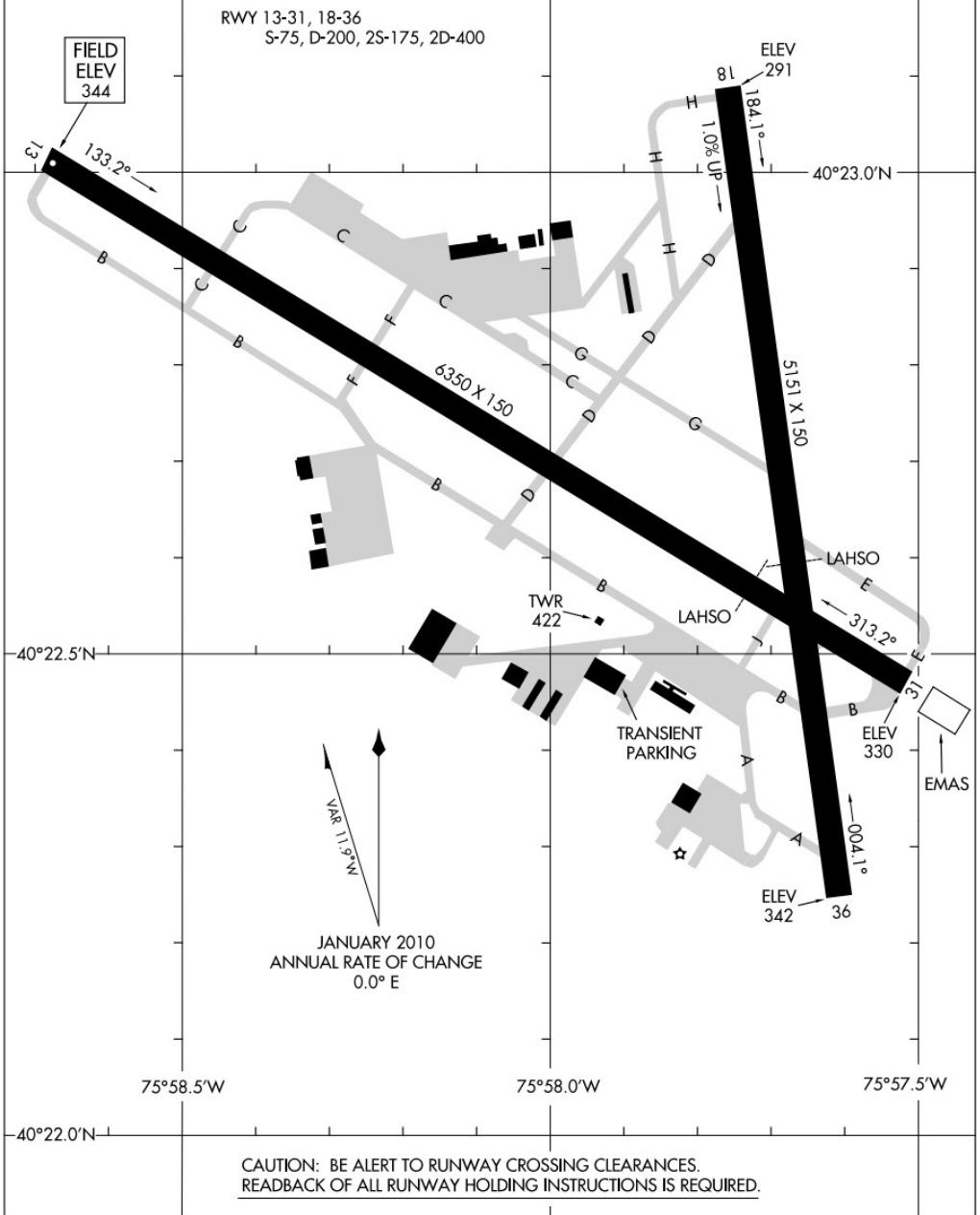
AIRPORT DIAGRAM

AL-627 (FAA)

READING RGNL /CARL A SPAATZ FIELD (RDG)
READING, PENNSYLVANIA

ATIS
127.1
READING TOWER★
119.9 288.3
GND CON
121.9

D



AIRPORT DIAGRAM

10210

READING, PENNSYLVANIA
READING RGNL /CARL A SPAATZ FIELD (RDG)

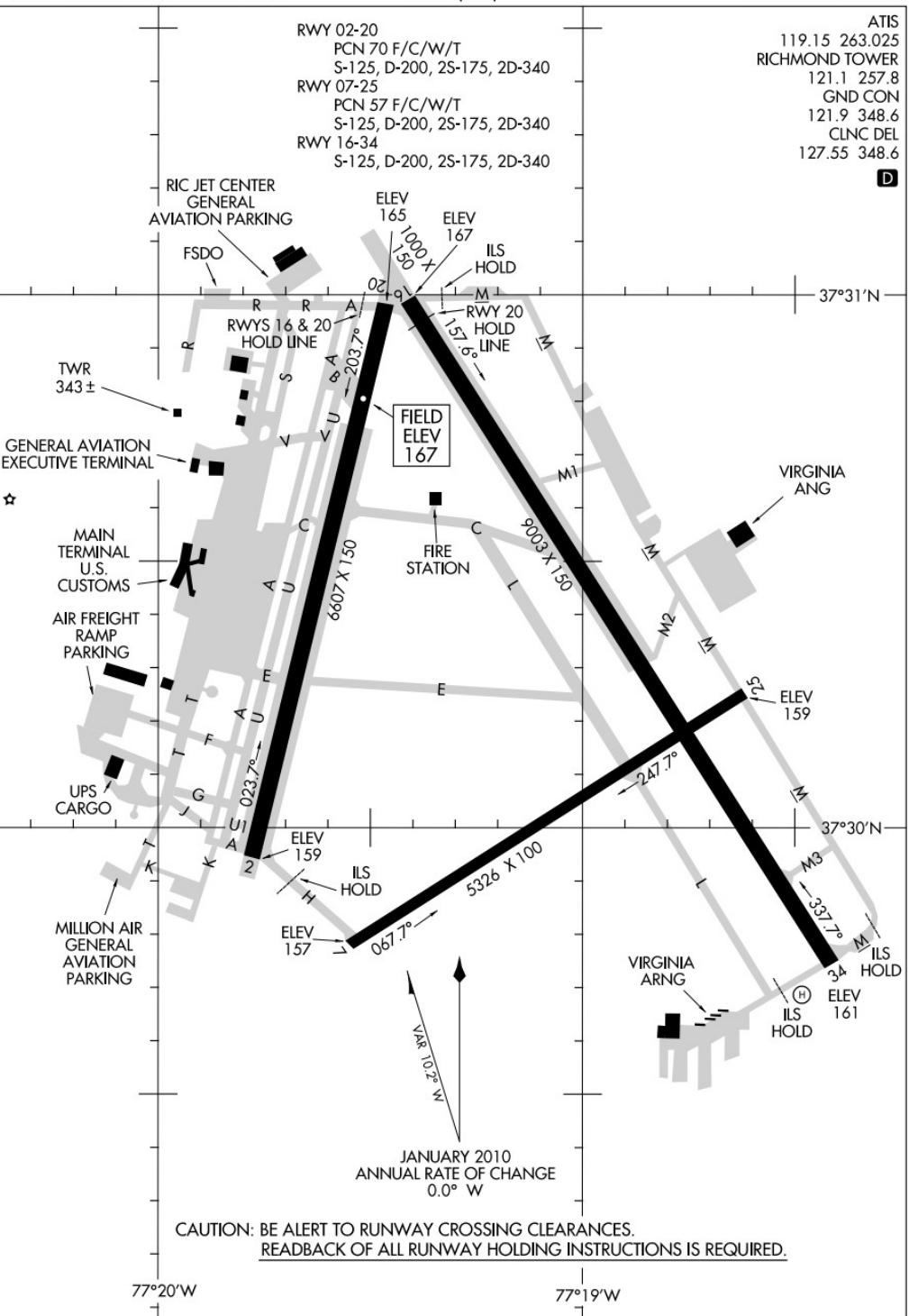
AIRPORT DIAGRAM

AL-347 (FAA)

RICHMOND INTL (RIC)
RICHMOND, VIRGINIA

RWY 02-20
PCN 70 F/C/W/T
S-125, D-200, 2S-175, 2D-340
RWY 07-25
PCN 57 F/C/W/T
S-125, D-200, 2S-175, 2D-340
RWY 16-34
S-125, D-200, 2S-175, 2D-340

ATIS
119.15 263.025
RICHMOND TOWER
121.1 257.8
GND CON
121.9 348.6
CLNC DEL
127.55 348.6
D



AIRPORT DIAGRAM

10266

RICHMOND, VIRGINIA
RICHMOND INTL (RIC)

10210

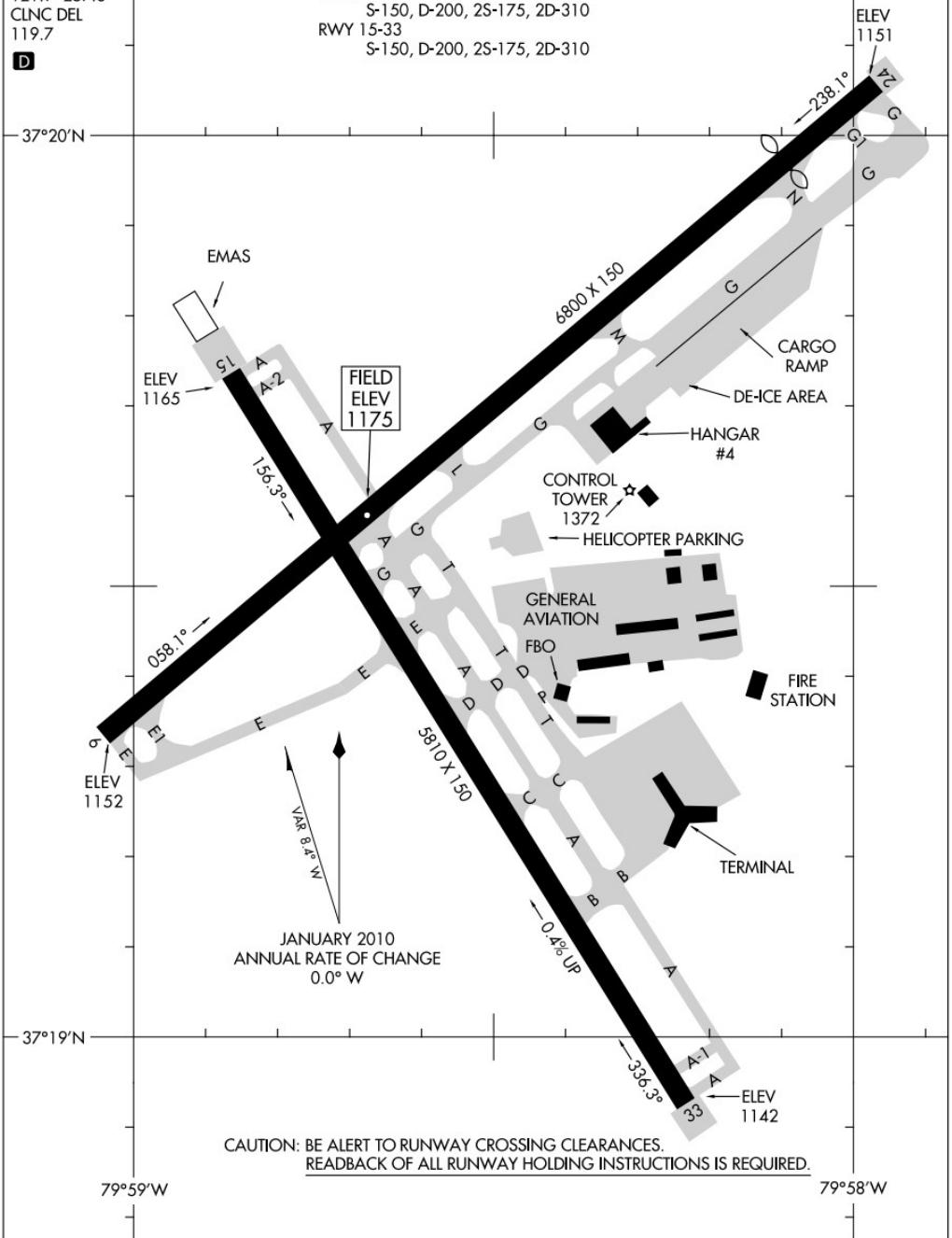
AIRPORT DIAGRAM

AL-349 (FAA)

ROANOKE RGNL/WOODRUM FIELD (ROA)
ROANOKE, VIRGINIA

ATIS	
134.95	
ROANOKE TOWER	
118.3 257.8	
GND CON	
121.9 257.8	
CLNC DEL	
119.7	

RWY 06-24
S-150, D-200, 2S-175, 2D-310
RWY 15-33
S-150, D-200, 2S-175, 2D-310



AIRPORT DIAGRAM

ROANOKE, VIRGINIA
ROANOKE RGNI / WOODRUM FIELD (ROA)

NE, 23 SEP 2010 to 18 NOV 2010

0266

AIRPORT DIAGRAM

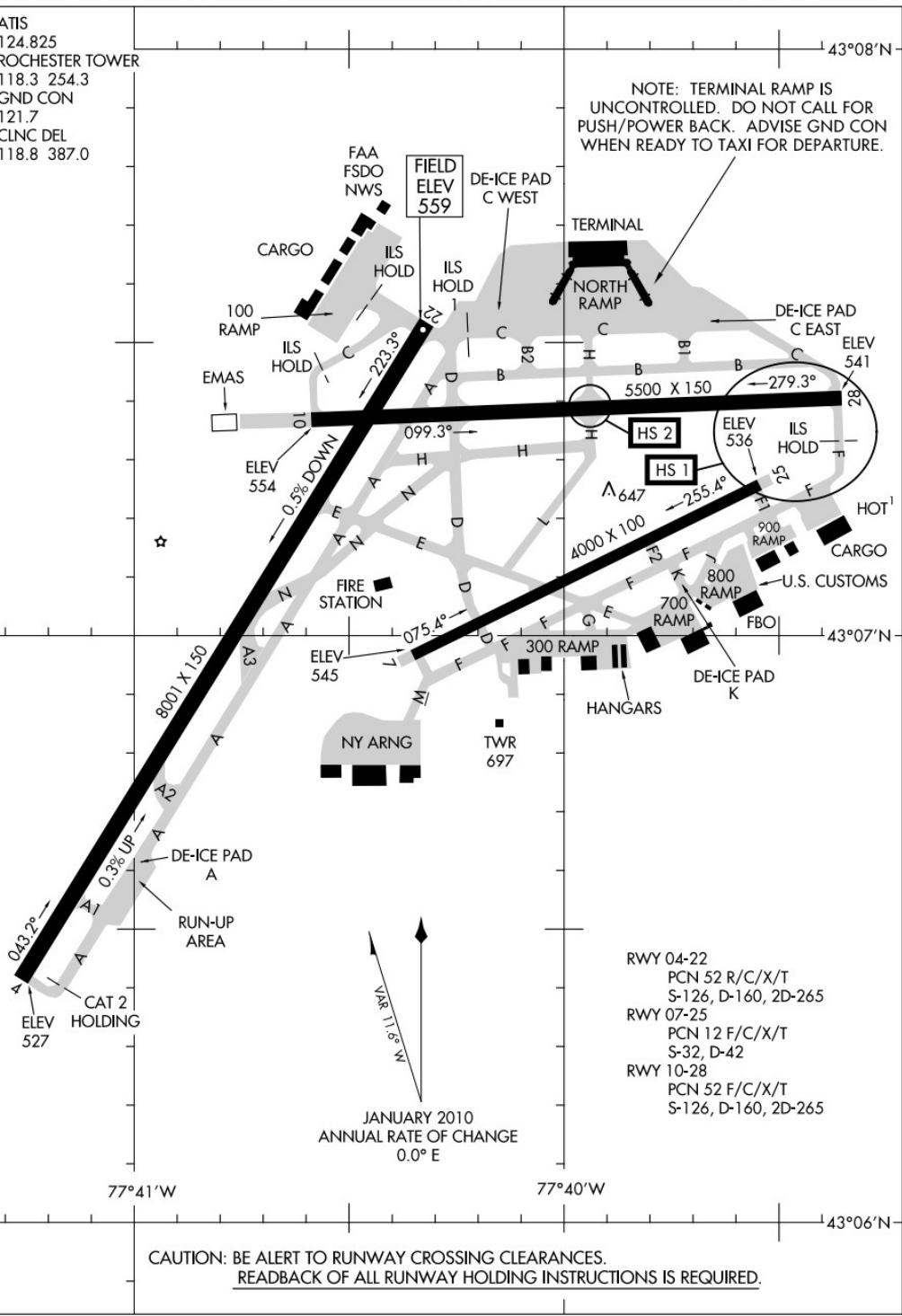
AI 351 (EAA)

ROCHESTER/GREATER ROCHESTER INTL (ROC)
ROCHESTER, NEW YORK

ATIS
124.825
ROCHESTER TOWER
118.3 254.3
GND CON
121.7
CLNC DEL
118.8 387.0

$\pm 43^{\circ}08'N$

NOTE: TERMINAL RAMP IS UNCONTROLLED. DO NOT CALL FOR PUSH/POWER BACK. ADVISE GND CON WHEN READY TO TAXI FOR DEPARTURE.



AIRPORT DIAGRAM

0266

ROCHESTER, NEW YORK
ROCHESTER/GREATER ROCHESTER INTL (ROC)

NE, 23 SEP 2010 to 18 NOV 2010

10266

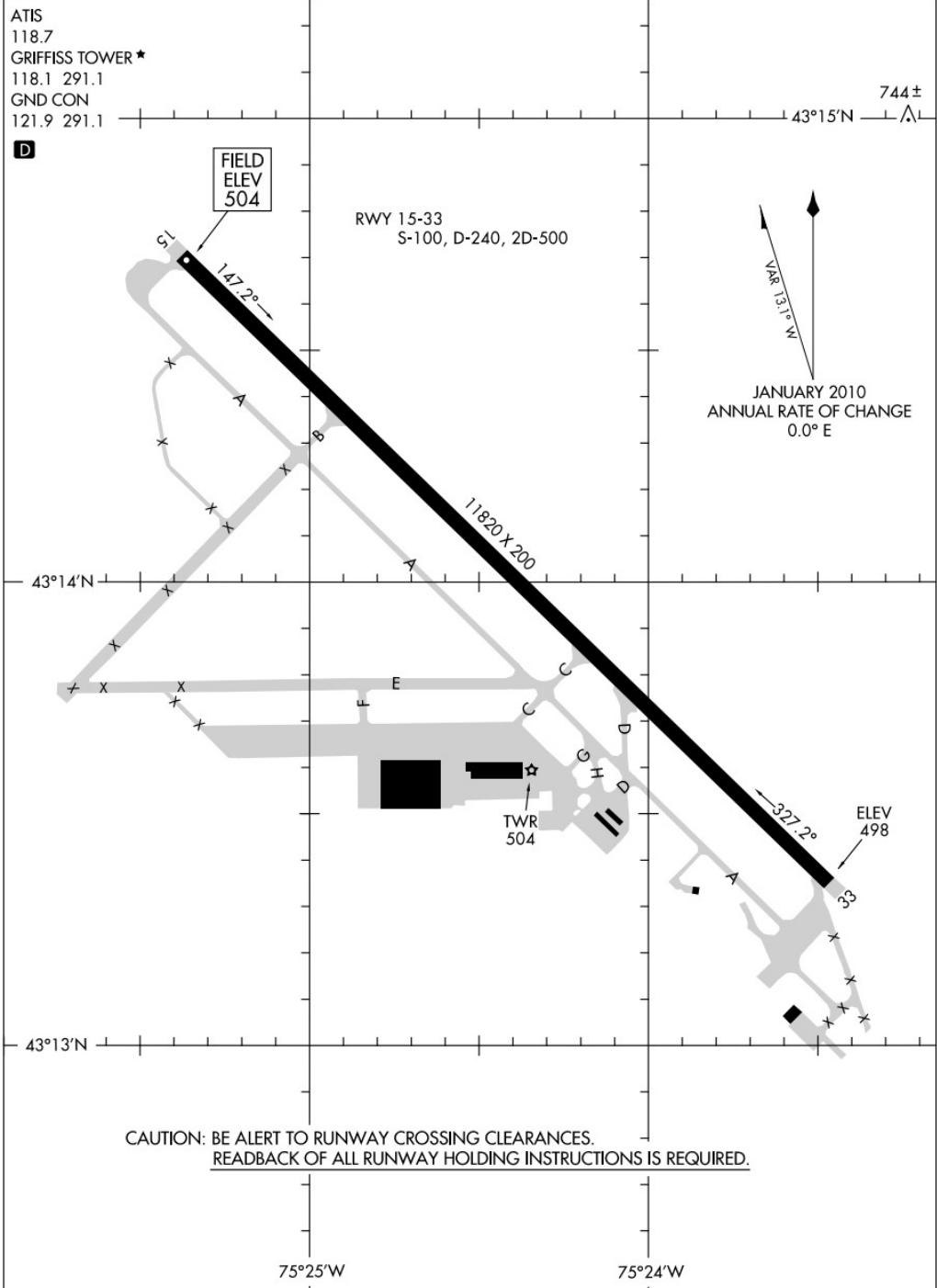
AIRPORT DIAGRAM

AL-9515 (FAA)

ROME/GRIFFISS INTL (RME)
ROME, NEW YORK

ATIS
118.7
GRIFFISS TOWER ★
118.1 291.1
GND CON
121.9 291.1

D



AIRPORT DIAGRAM

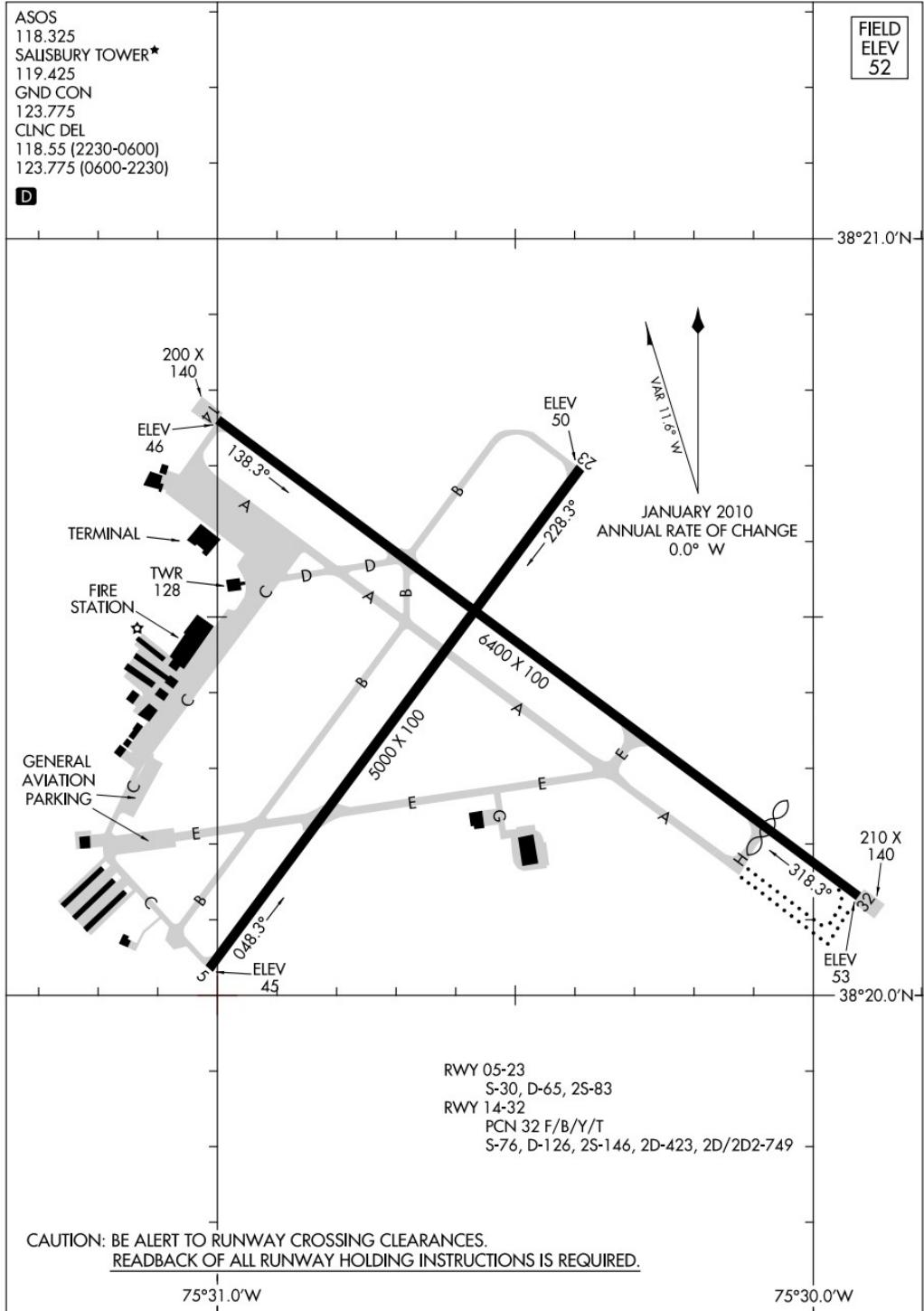
10266

ROME, NEW YORK
ROME/GRIFFISS INTL (RME)

AIRPORT DIAGRAM

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)
AL-977 (FAA)

SALISBURY, MARYLAND



10210

AIRPORT DIAGRAM

AL-382 (FAA)

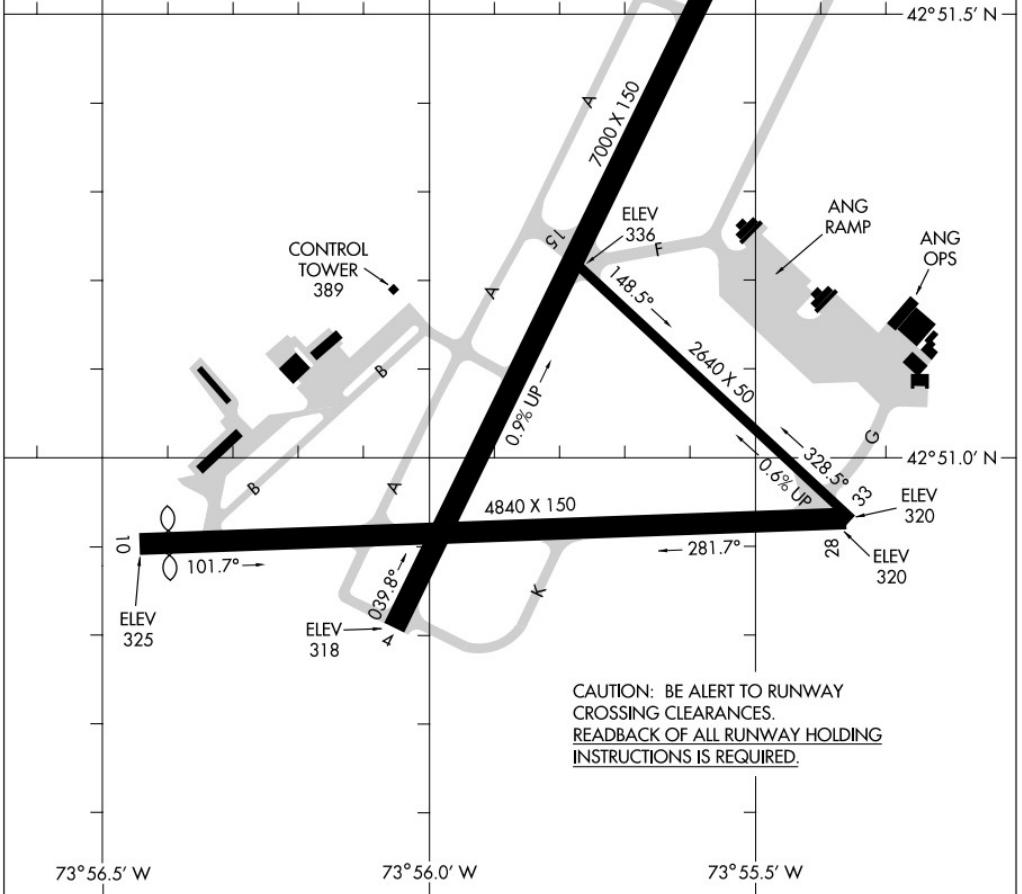
SCHEONECTADY COUNTY (SCH)
SCHEONECTADY, NEW YORK

AWOS-3
119.275
SCHEONECTADY TOWER★
121.3 321.1
GND CON
121.9

RWY 04-22
S-95, D-175, 2D-348,
2D/2D2-850

RWY 10-28
S-55, D-134, 2S-170, 2D-218,
2D/D1-430, 2D/2D2-541,
C5-559

RWY 15-33
2S-175



AIRPORT DIAGRAM

10210

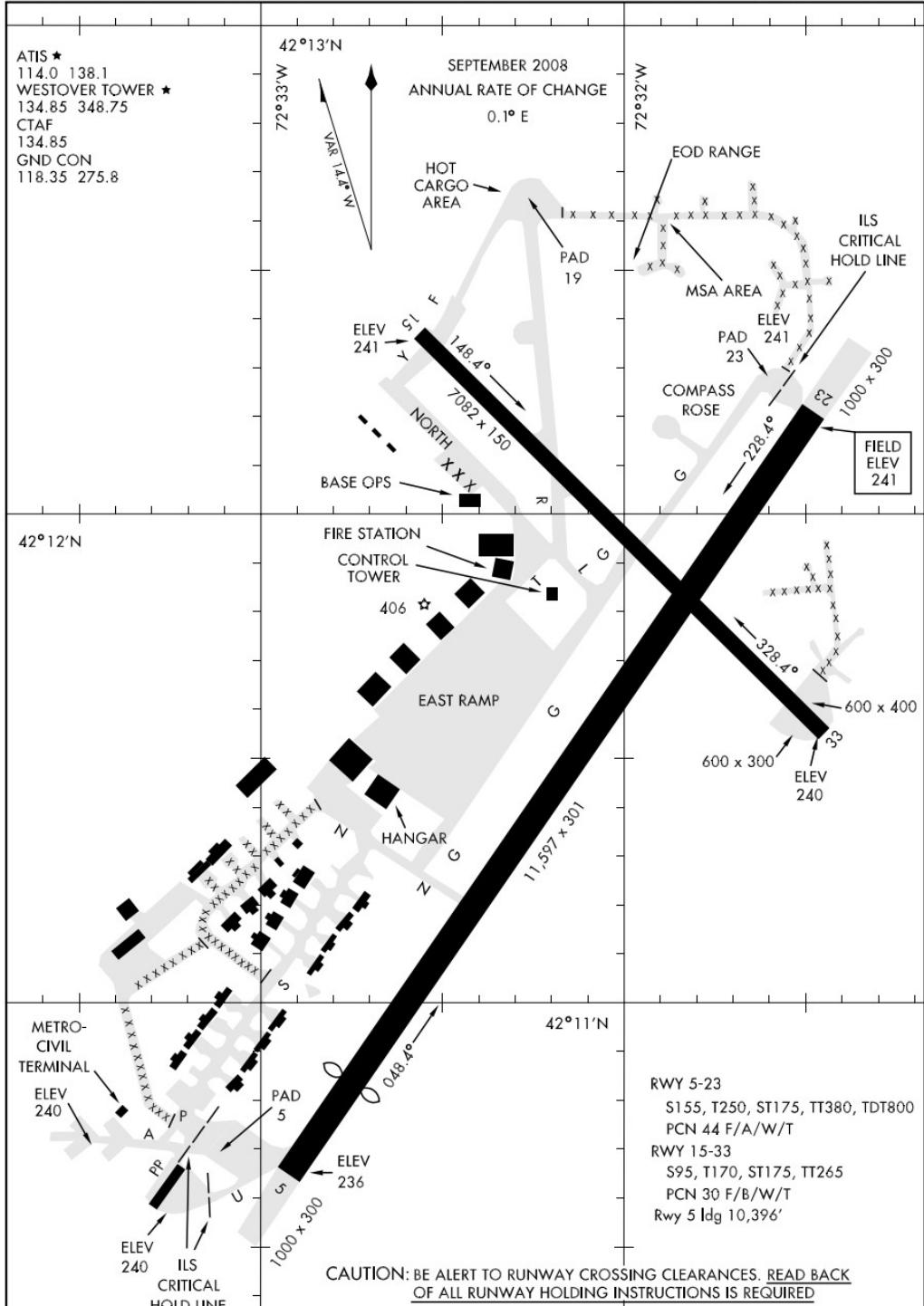
SCHEONECTADY, NEW YORK
SCHEONECTADY COUNTY (SCH)

AIRPORT DIAGRAM

AFD-447 [USAF]

WESTOVER ARB/METROPOLITAN (KCEF)

SPRINGFIELD/CHICOPPEE, MASSACHUSETTS



AIRPORT DIAGRAM

SPRINGFIELD/CHICOPPEE, MASSACHUSETTS
WESTOVER ARB/METROPOLITAN (KCEF)

10210

AIRPORT DIAGRAM

AL-411 (FAA)

SYRACUSE HANCOCK INTL (SYR)
SYRACUSE, NEW YORK

READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

124.225 SYRACUSE TOWER
120.3 239.0 GND CON
121.7 348.6 CLNC DEL
125.05 257.775

IR
210

AIRPORT DIAGRAM

SYRACUSE, NEW YORK
SYRACUSE HANCOCK INTL (SYR)

NE, 23 SEP 2010 to 18 NOV 2010

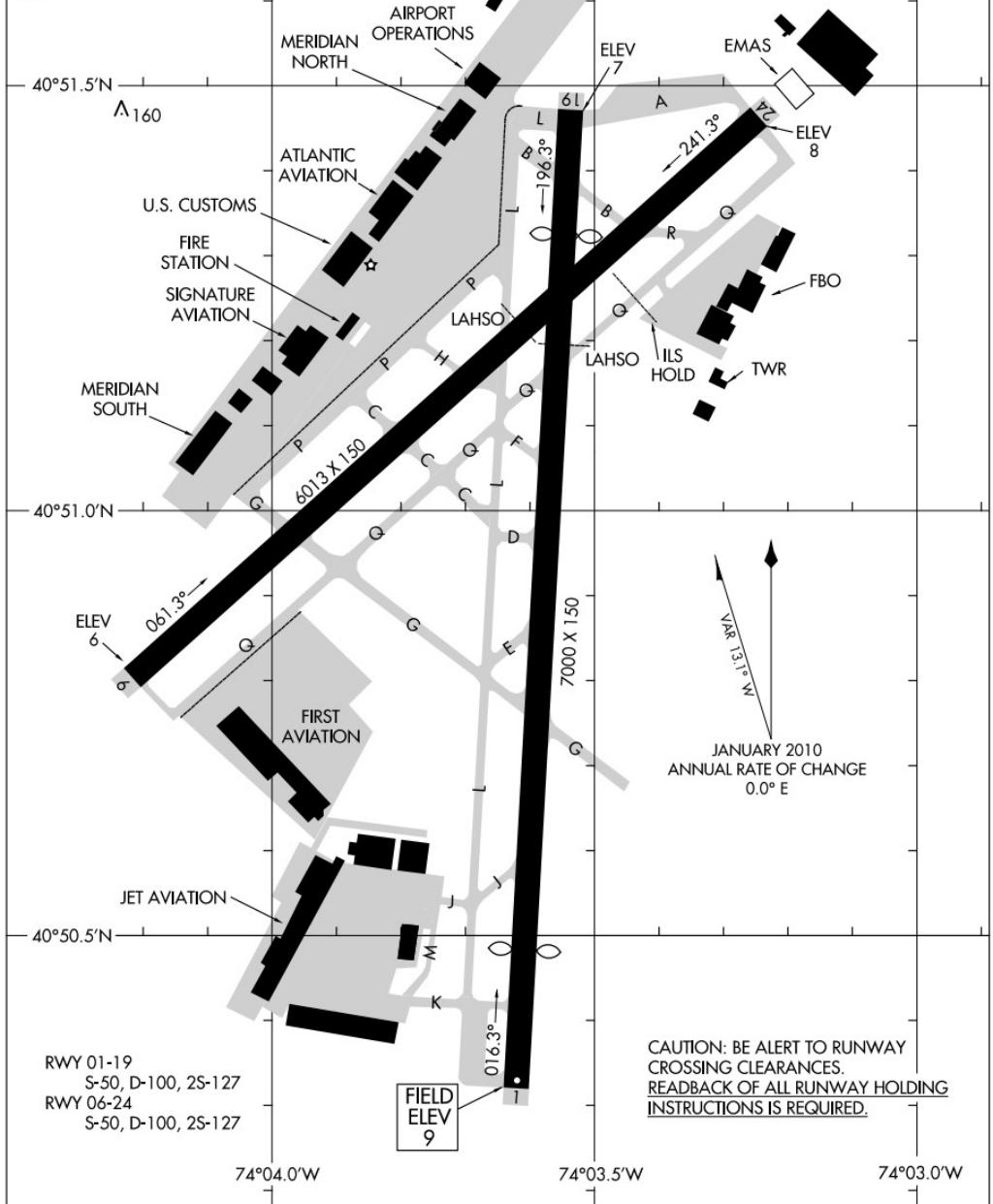
AIRPORT DIAGRAM

AL-890 (FAA)

TERTBORO (TEB)
TERTBORO, NEW JERSEY

ATIS
114.2 132.85
TERTBORO TOWER
119.5
GND CON
121.9
CLNC DEL
128.05

D



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM
10210

TERTBORO, NEW JERSEY
TERTBORO (TEB)

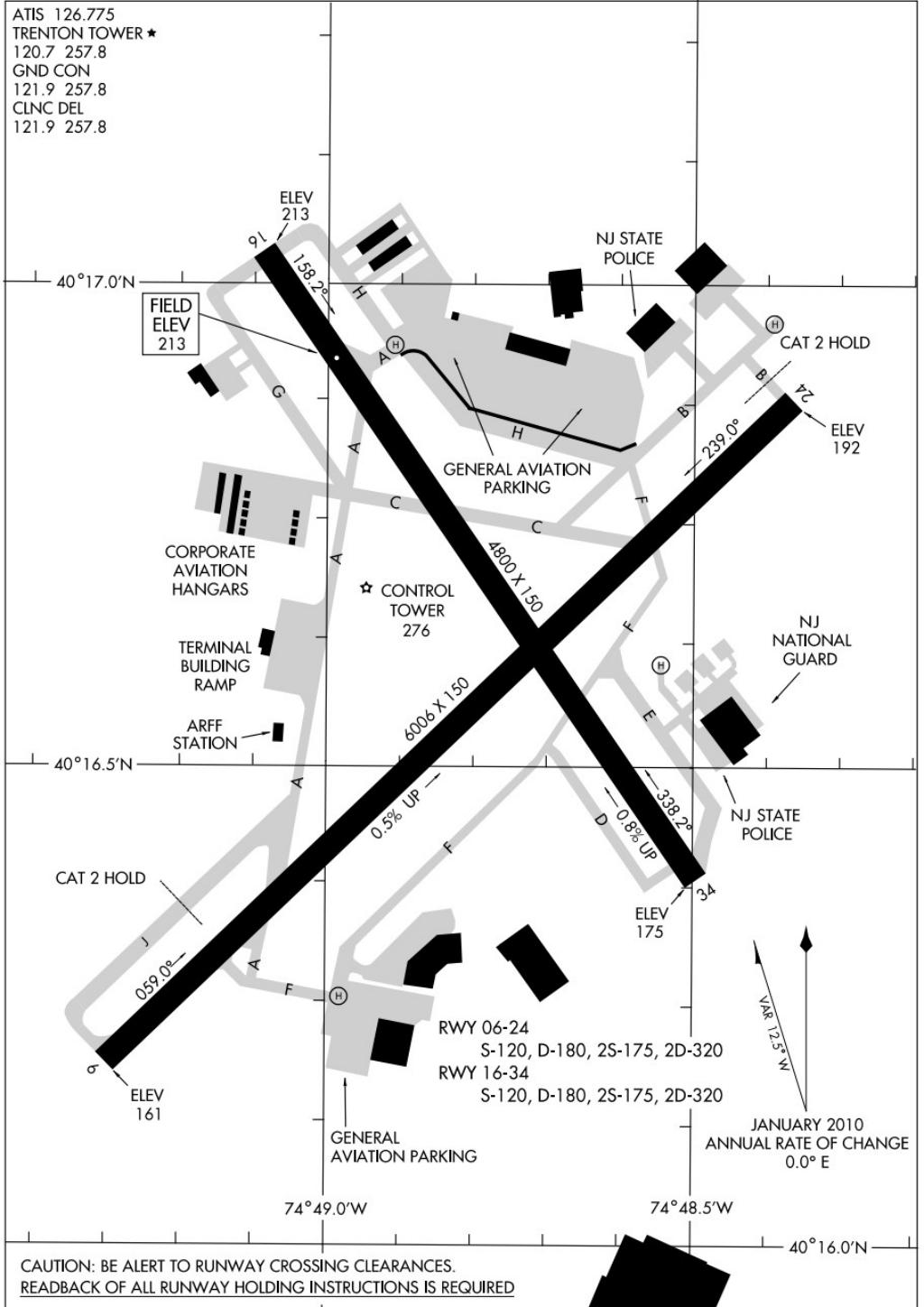
10210

AIRPORT DIAGRAM

AL-982 (FAA)

TRENTON MERCER (TTN)
TRENTON, NEW JERSEY

ATIS 126.775
 TRENTON TOWER ★
 120.7 257.8
 GND CON
 121.9 257.8
 CLNC DEL
 121.9 257.8

AIRPORT DIAGRAM
10210TRENTON, NEW JERSEY
TRENTON MERCER (TTN)

10210

AIRPORT DIAGRAM

VINEYARD HAVEN / MARTHAS VINEYARD (MVY)
AL-694 (FAA)

VINEYARD HAVEN, MASSACHUSETTS

ATIS
126.25
VINEYARD TOWER *121.4
GND CON
124.35
CLNC DEL
124.35
CLNC DEL
119.7 (When Twr Closed)

D

FIELD
ELEV
67

145.7°

3297 X 75

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° E0.3% UP
325.7°ELEV
63

235.6°

A

ELEV
57

5504 X 100

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AIRPORT DIAGRAM

WASHINGTON / RONALD REAGAN WASHINGTON NATIONAL (DCA)

AL-443 (FAA)

WASHINGTON, D.C.

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE
TO 18,000 MSL.

FIELD
ELEV
15

S
153°
4°

VEHICLE LANE REMAIN
CLEAR WHILE TAXIING

NORTH
HANGARS

COMMUTER PARKING

REPORTING POINTS

NORTH PIER GATES 35-45

TERMINAL C

CONTROL TOWER

228

REPORTING POINTS

CENTER PIER GATES 23-34

REPORTING POINTS

TERMINAL B

SOUTH PIER GATES 15-22

ASDE-X Surveillance System in use.

Pilots should operate transponders
with Mode C on all twys and rwy's.

GATES 10-14

38° 51.0' N

GENERAL AVIATION
TERMINAL

NO TAXI

NWS

TERMINAL A

GATES 1-9

SOUTH HANGARS

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10210

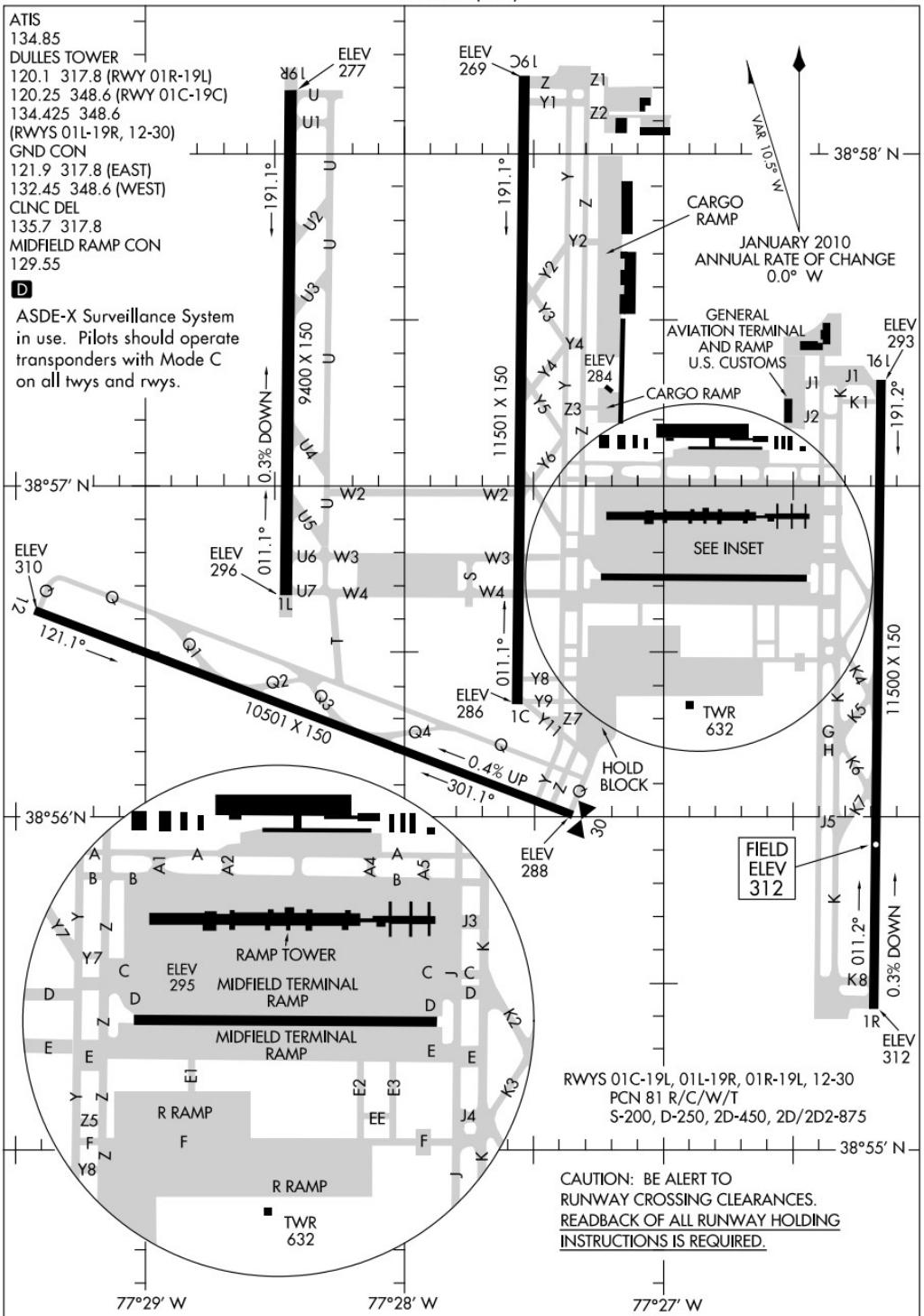
AIRPORT DIAGRAM

ATIS
134.85
DULLES TOWER
120.1 317.8 (RWY 01R-19L)
120.25 348.6 (RWY 01C-19C)
134.425 348.6
(RWYS 01L-19R, 12-30)
GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)
CLNC DEL
135.7 317.8
MIDFIELD RAMP CON
129.55

D

ASDE-X Surveillance System
in use. Pilots should operate
transponders with Mode C
on all twys and rwy's.

AL-5100 (FAA)

WASHINGTON DULLES INT'L (IAD)
WASHINGTON, DC

AIRPORT DIAGRAM

10210

WASHINGTON, DC

WASHINGTON DULLES INT'L (IAD)

10210

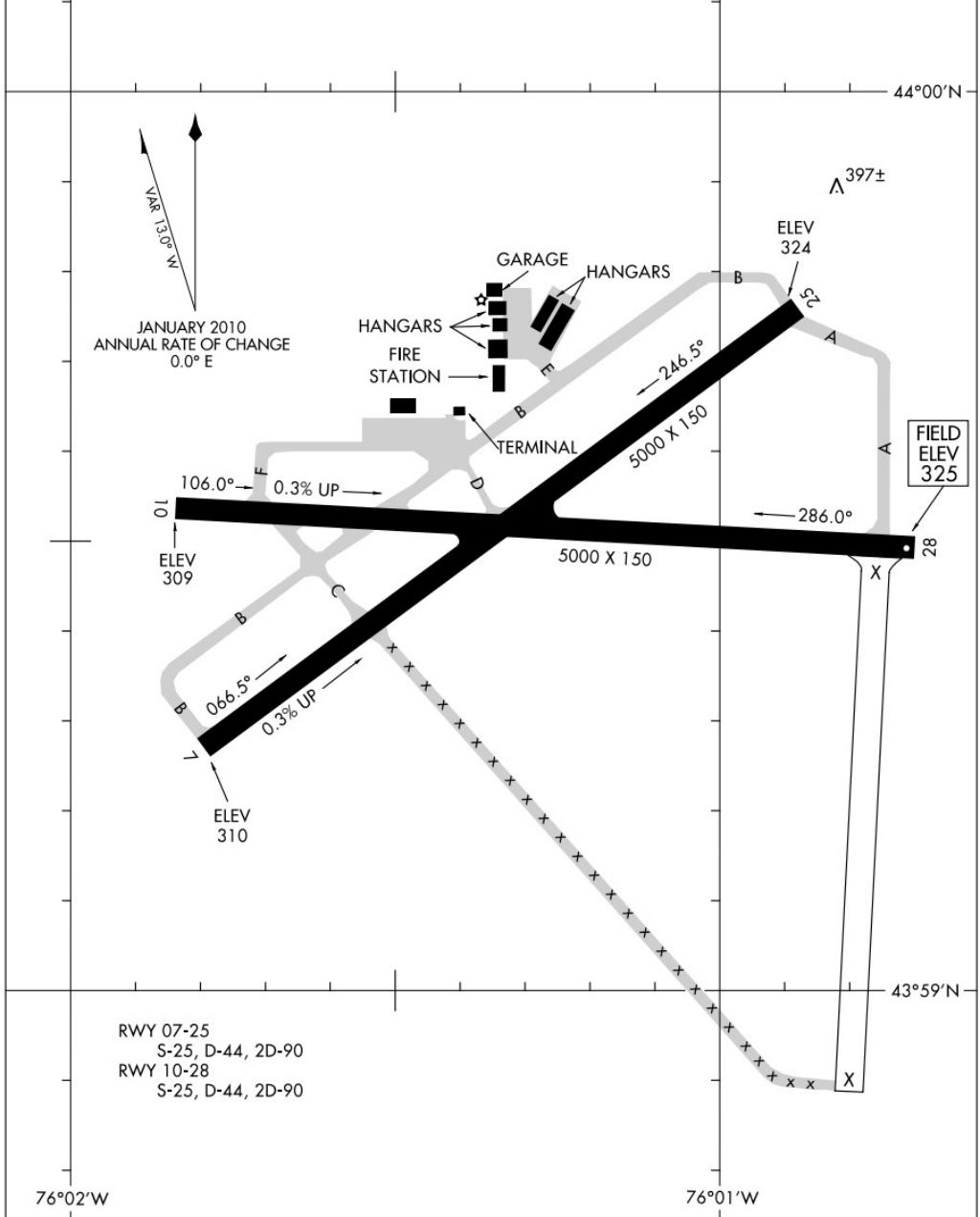
AIRPORT DIAGRAM

AL-666 (FAA)

WATERTOWN INTL (ART)
WATERTOWN, NEW YORK

ASOS
132.325
CTAF/UNICOM
123.0
CLNC DEL
120.8

D



AIRPORT DIAGRAM

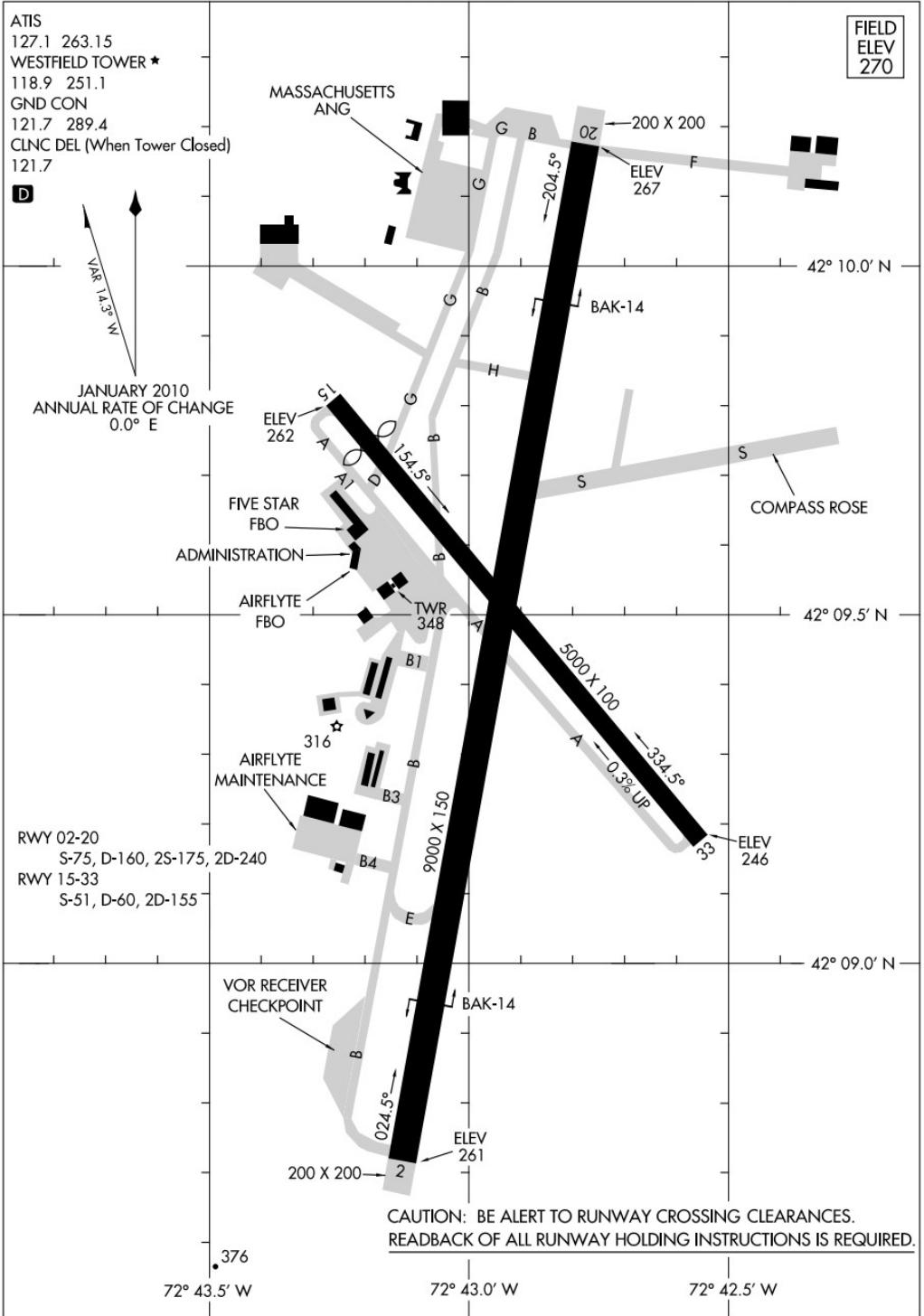
10210

WATERTOWN, NEW YORK
WATERTOWN INTL (ART)

10266

AIRPORT DIAGRAM

AL-446 (FAA)

WESTFIELD/BARNES MUNI (BAF)
WESTFIELD/SPRINGFIELD, MASSACHUSETTS

AIRPORT DIAGRAM

10266

WESTFIELD/SPRINGFIELD, MASSACHUSETTS
WESTFIELD/BARNES MUNI (BAF)

644

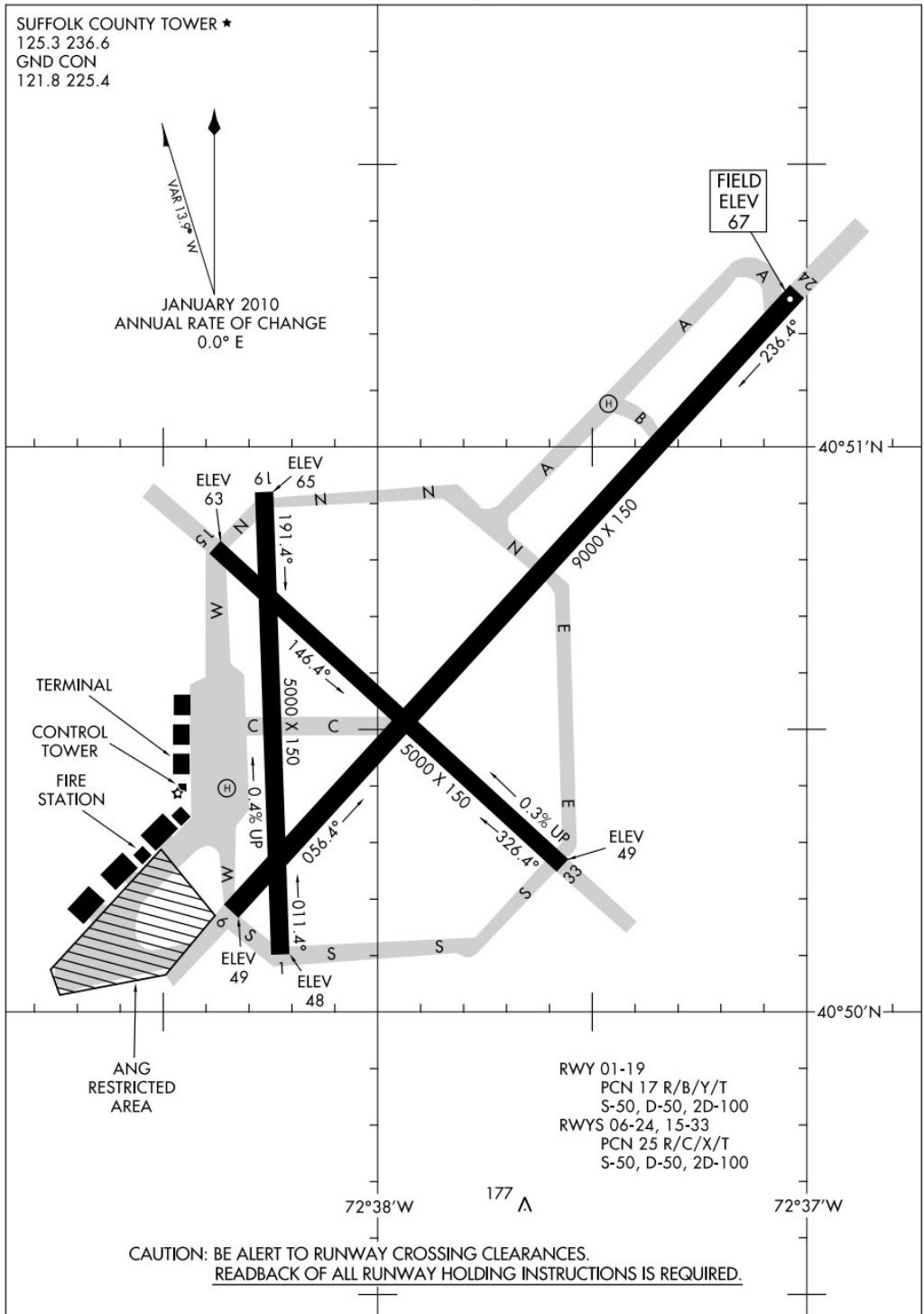
AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

WESTHAMPTON BEACH/FRANCIS S. GABRESKI (FOK)
AL-996 (FAA)

WESTHAMPTON BEACH, NEW YORK

AIRPORT DIAGRAM
10210WESTHAMPTON BEACH, NEW YORK
WESTHAMPTON BEACH/FRANCIS S. GABRESKI (FOK)

646

AIRPORT DIAGRAMS

10210

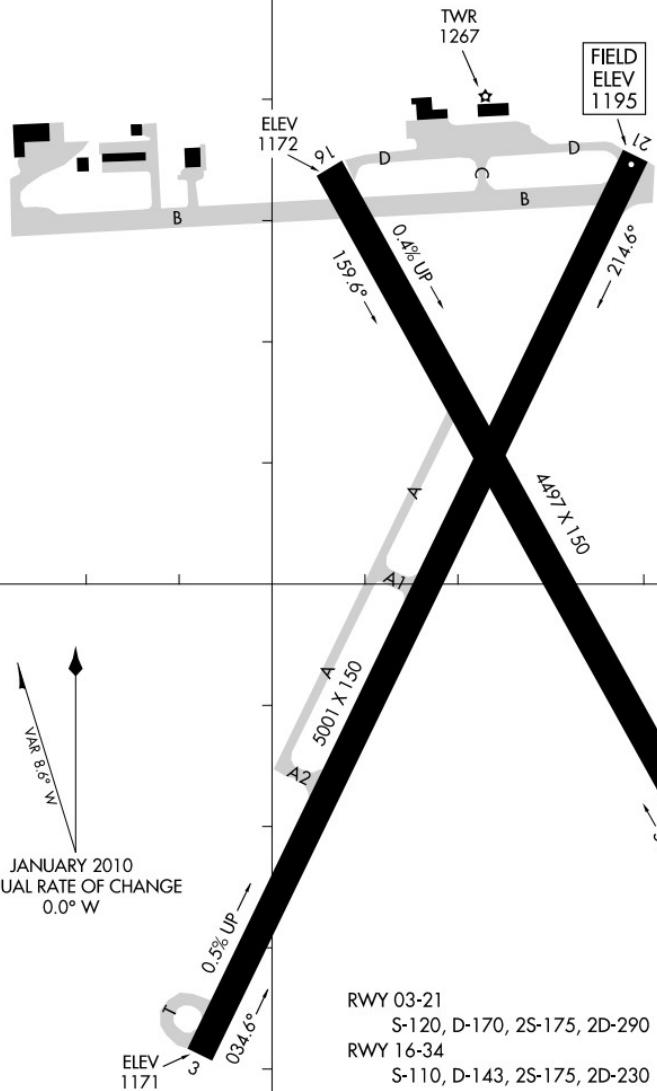
AIRPORT DIAGRAM

AL-650 (FAA)

WHEELING OHIO COUNTY (HLG)
WHEELING, WEST VIRGINIA

ASOS
127.375
WHEELING TOWER*
118.1 257.8
GND CON
121.75

40°11.0'N



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

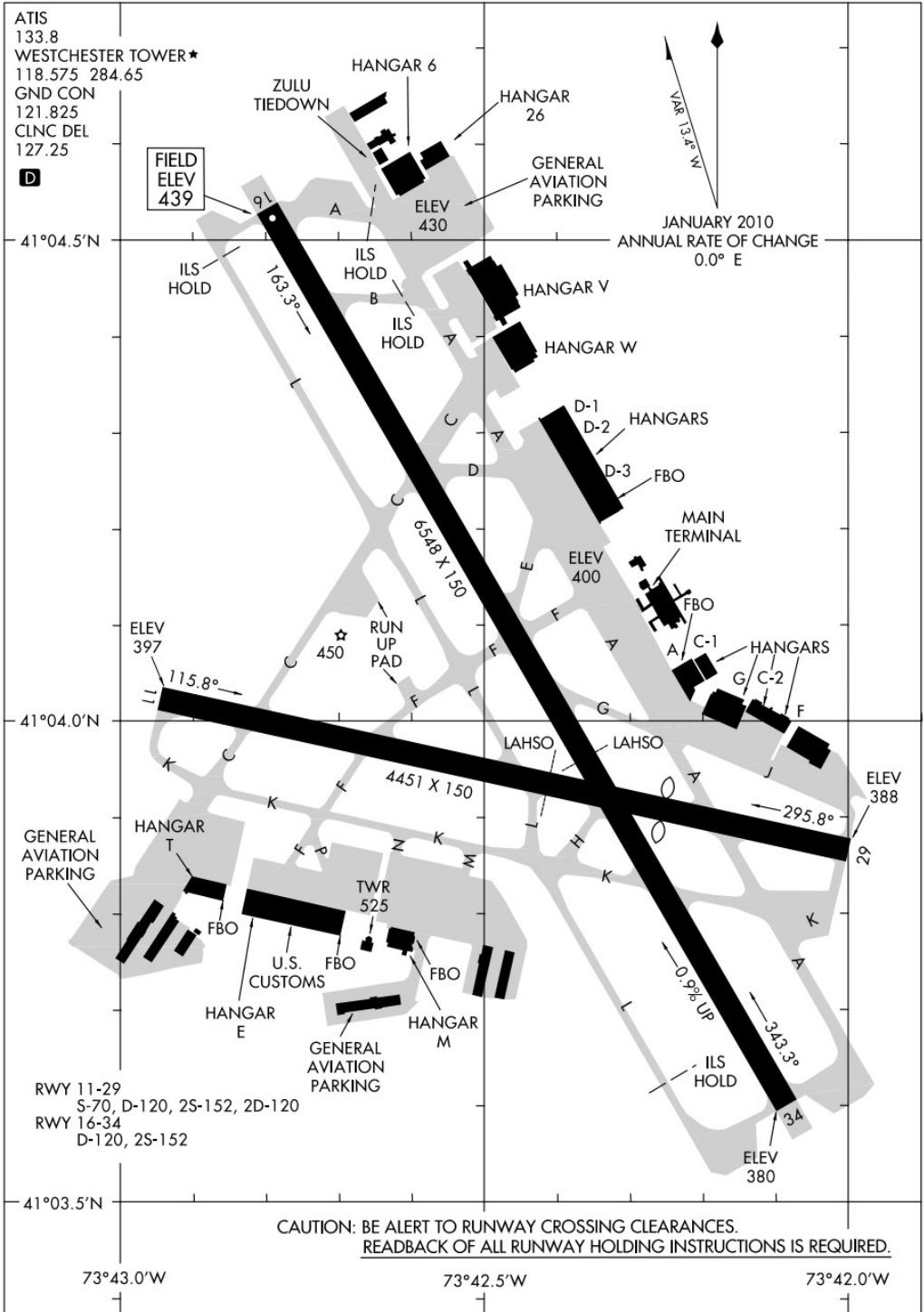
AIRPORT DIAGRAM
10210

WHEELING, WEST VIRGINIA
WHEELING OHIO COUNTY (HLG)

10210

AIRPORT DIAGRAM

AL-651 (FAA)

WHITE PLAINS/WESTCHESTER COUNTY (HPN)
WHITE PLAINS, NEW YORK

AIRPORT DIAGRAM

10210

WHITE PLAINS, NEW YORK
WHITE PLAINS/WESTCHESTER COUNTY (HPN)

AIRPORT DIAGRAM

10210

AIRPORT DIAGRAM

AL-661 (FAA)

WILKES-BARRE/SCRANTON INTL (AVP)
WILKES-BARRE/SCRANTON, PENNSYLVANIA

ATIS
111.6
WILKES-BARRE TOWER
120.1 257.8
GND CON
121.9

D



JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° E

RWY 04-22
45 F/A/X/T
S-133, D-173, 2D-300
RWY 10-28
S-58, D-80, 2S-101, 2D-125

ELEV
911

EMAS

0.7% Up

225.0°

41°20.5'N

ELEV
935
28ELEV
922

104.0°

0.3% UP

RAMPS

PASSENGER TERMINAL

TWR
1016

FIRE STATION

HANGARS

GENERAL AVIATION

FIELD
ELEV
962

045.0°

EMAS

7501 X 150

B5
B4
C
B3
B2
B

4300 X 150

D

LAHSO

A1112

41°20.0'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

75°43.5'W

75°43.0'W

AIRPORT DIAGRAM

10210

WILKES-BARRE/SCRANTON, PENNSYLVANIA
WILKES-BARRE/SCRANTON INTL (AVP)

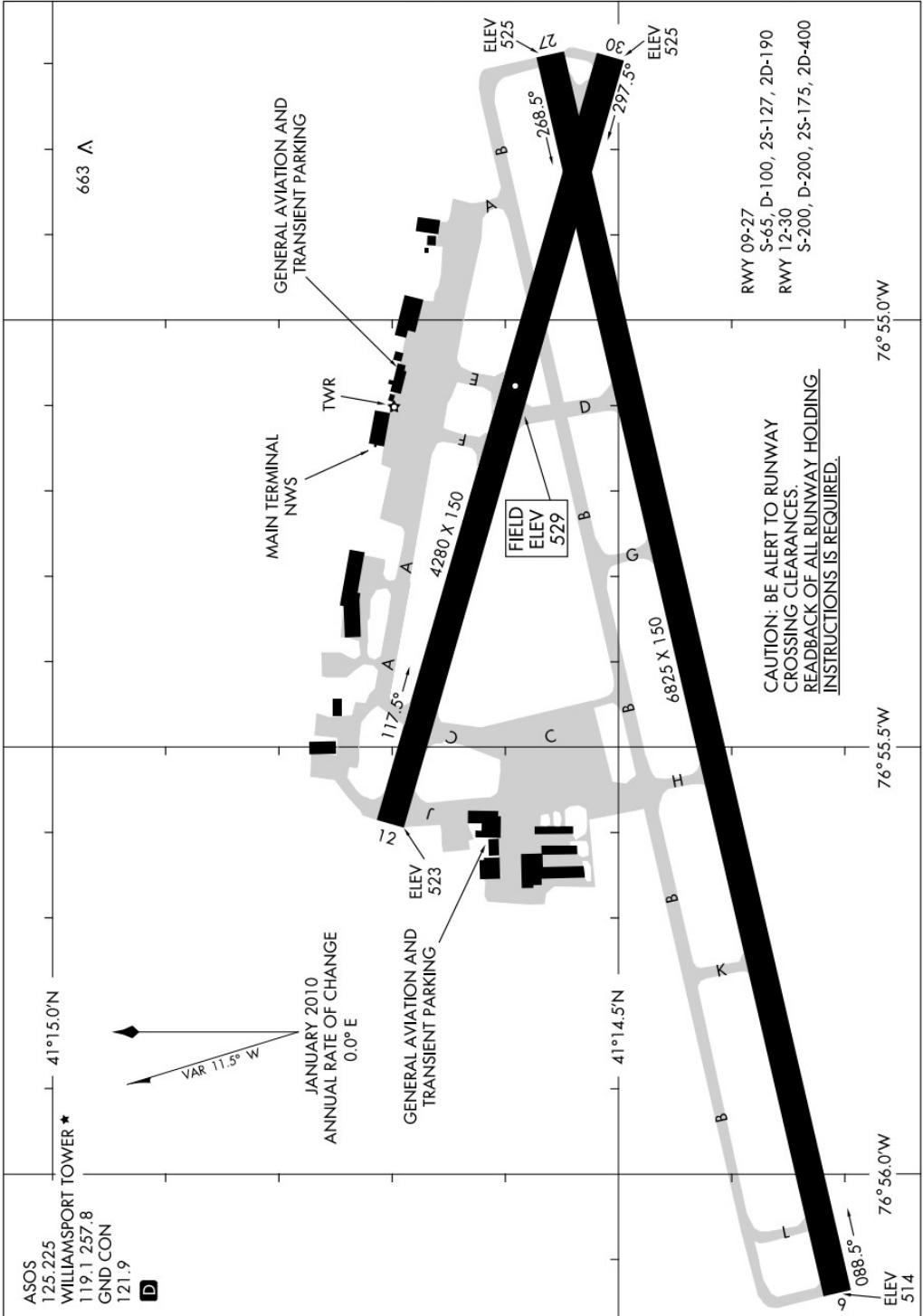
NE. 23 SEP 2010 to 18 NOV 2010

10210

AIRPORT DIAGRAM

AL-457 (FAA)

WILLIAMSPORT RGNL (IPT)
WILLIAMSPORT, PENNSYLVANIA



AIRPORT DIAGRAM

10210

**WILLIAMSPORT, PENNSYLVANIA
WILLIAMSPORT RGNL (IPT)**

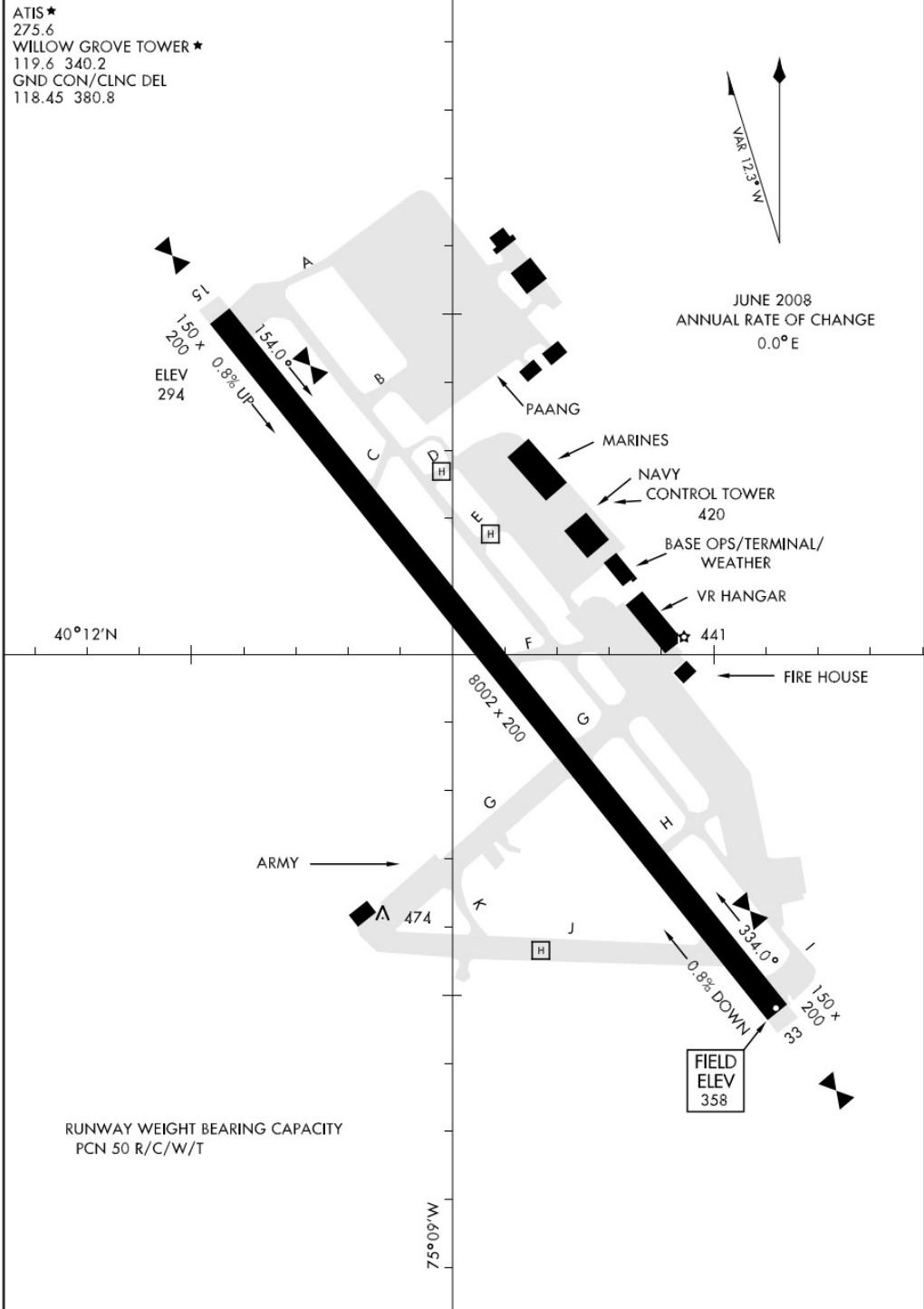
0813

AIRPORT DIAGRAM

AFD-598 [USN]

WILLOW GROVE NAS JRB (KNXX)
WILLOW GROVE, PENNSYLVANIA

ATIS★
275.6
WILLOW GROVE TOWER★
119.6 340.2
GND CON/CINC DEL
118.45 380.8



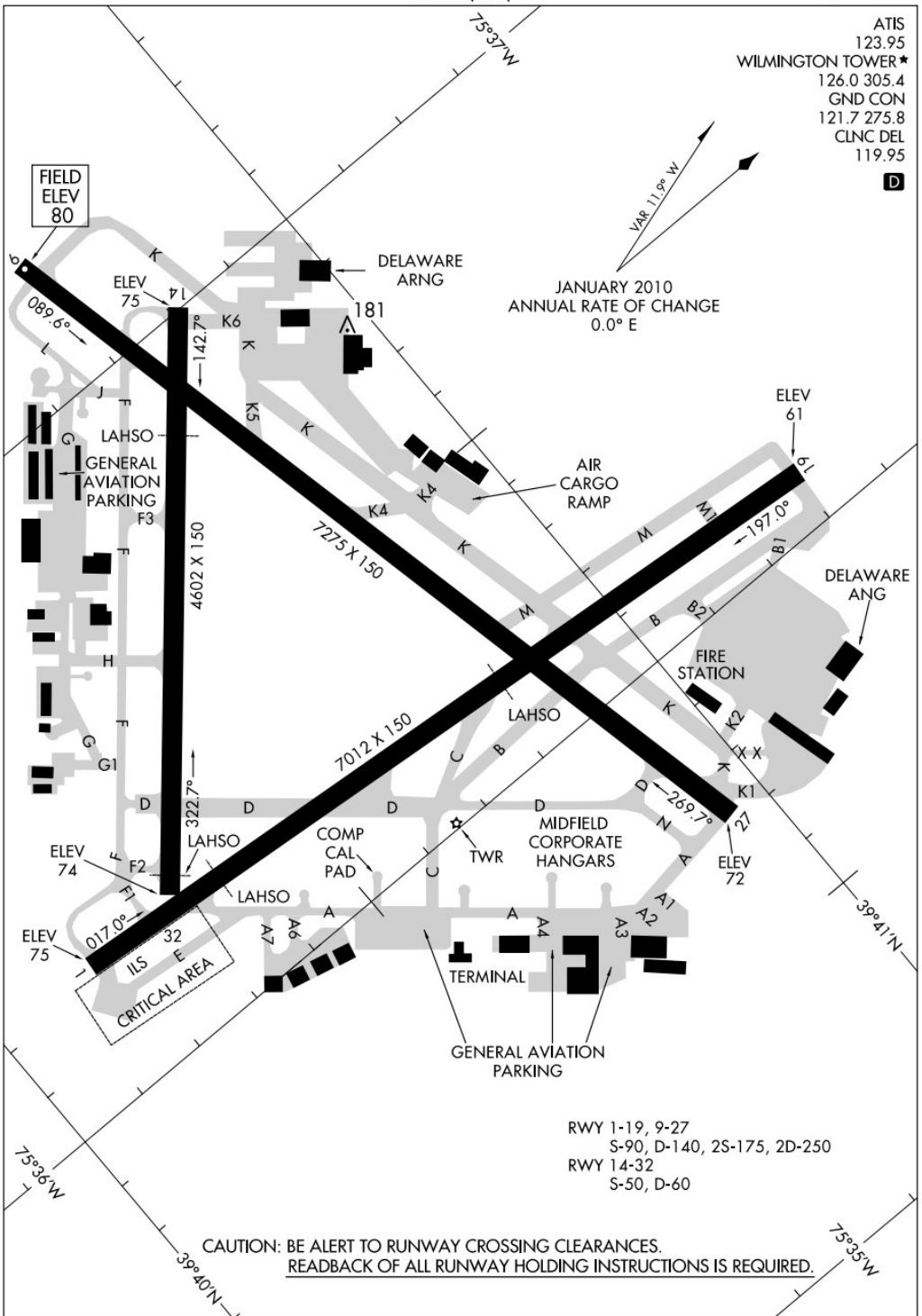
AIRPORT DIAGRAM

WILLOW GROVE, PENNSYLVANIA
WILLOW GROVE NAS JRB (KNXX)

10210

AIRPORT DIAGRAM

AL-458 (FAA)

WILMINGTON/ NEW CASTLE (ILG)
WILMINGTON, DELAWAREAIRPORT DIAGRAM
10210WILMINGTON, DELAWARE
WILMINGTON/ NEW CASTLE (ILG)

10210

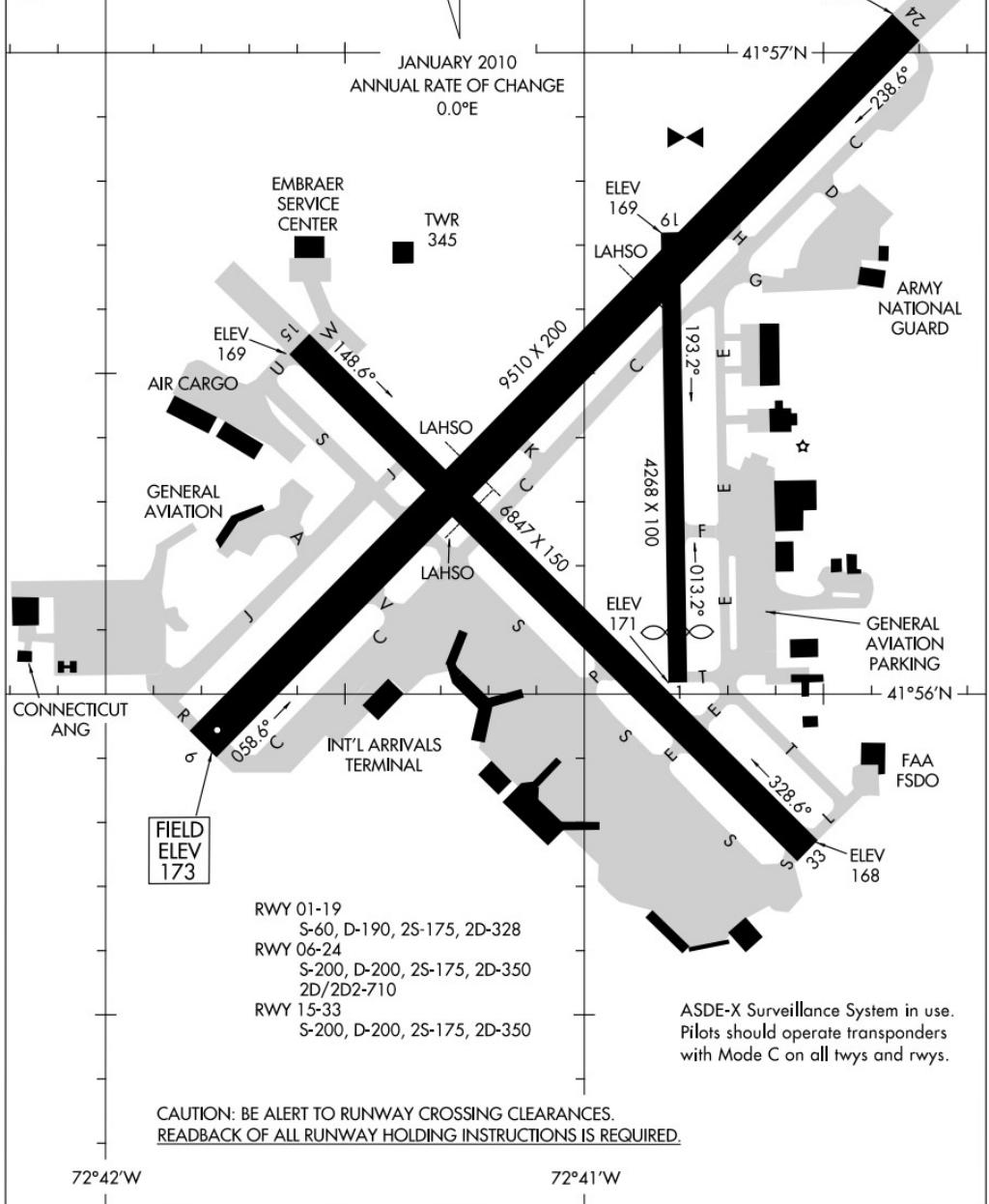
AIRPORT DIAGRAM

AL-460 (FAA)

WINDSOR LOCKS / BRADLEY INTL (BDL)
WINDSOR LOCKS, CONNECTICUT

ATIS
118.15
BRADLEY TOWER
120.3 351.8
GND CON
121.9 348.6
CLNC DEL
121.75 322.3

D



AIRPORT DIAGRAM

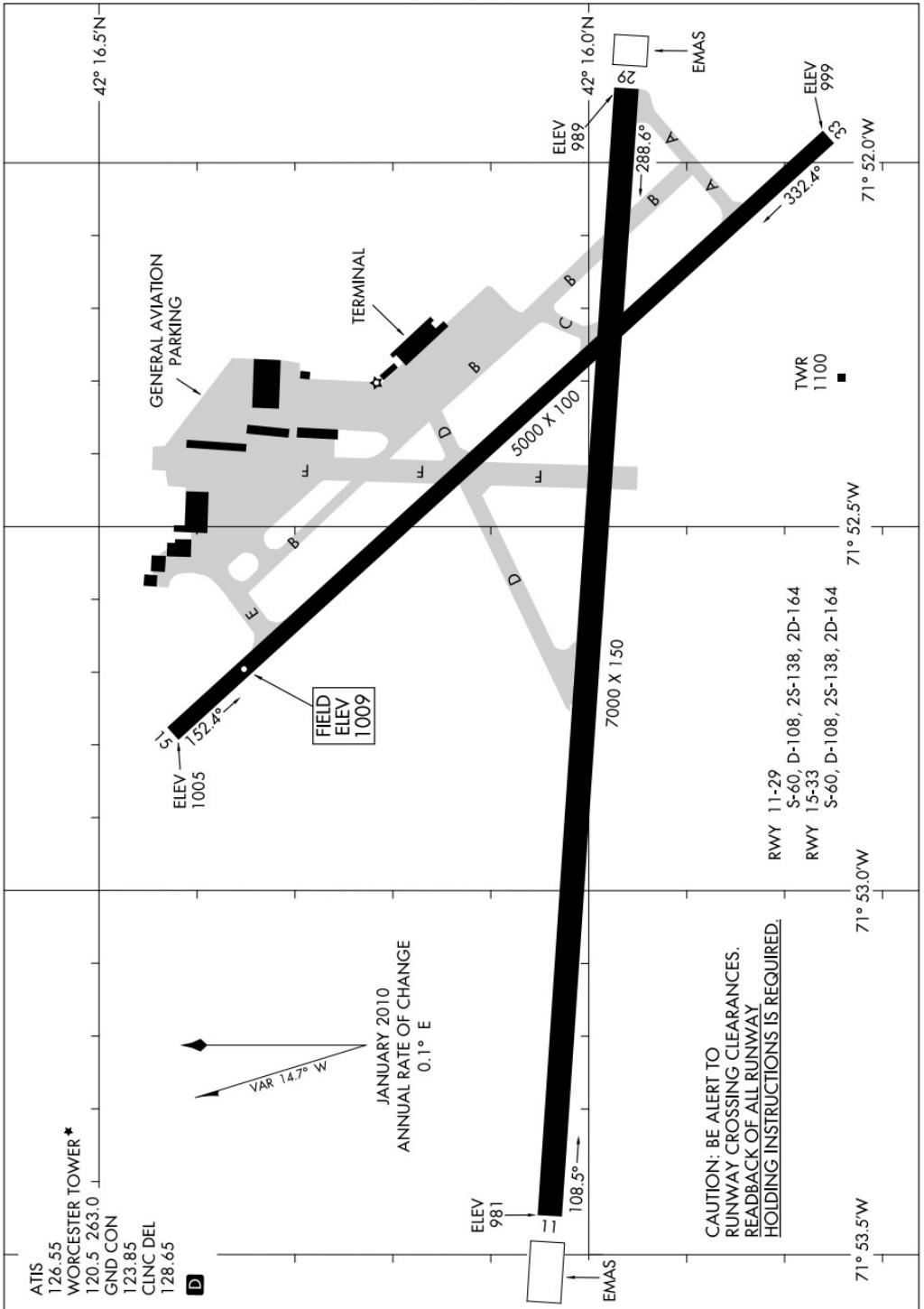
10210

WINDSOR LOCKS, CONNECTICUT
WINDSOR LOCKS / BRADLEY INTL (BDL)

10210

AIRPORT DIAGRAM

AL-652 (FAA)

WORCESTER RGNL (ORH)
WORCESTER, MASSACHUSETTS10210
AIRPORT DIAGRAMWORCESTER, MASSACHUSETTS
WORCESTER RGNL (ORH)

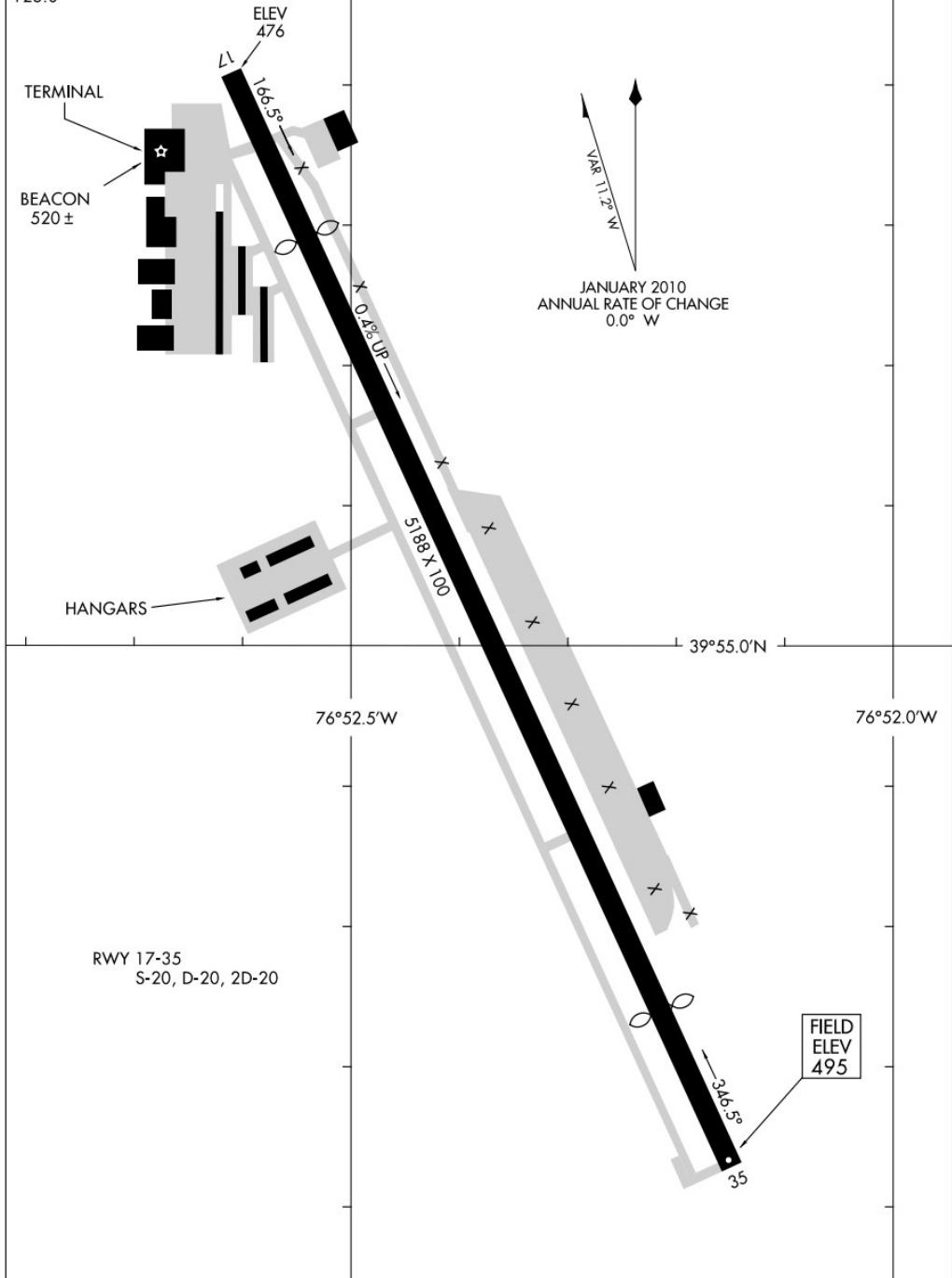
654

AIRPORT DIAGRAMS

10210

AIRPORT DIAGRAM

AL-5137 (FAA)

YORK (THV)
YORK, PENNSYLVANIAASOS
119.275
CTAF/UNICOM
123.0

AIRPORT DIAGRAM

10210

YORK, PENNSYLVANIA
YORK (THV)

**INTENTIONALLY
LEFT
BLANK**

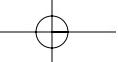
NATIONAL WEATHER SERVICE (NWS)
 UPPER AIR OBSERVING STATION (UAOS)
 AND
 WEATHER RADAR NETWORK



LEGEND

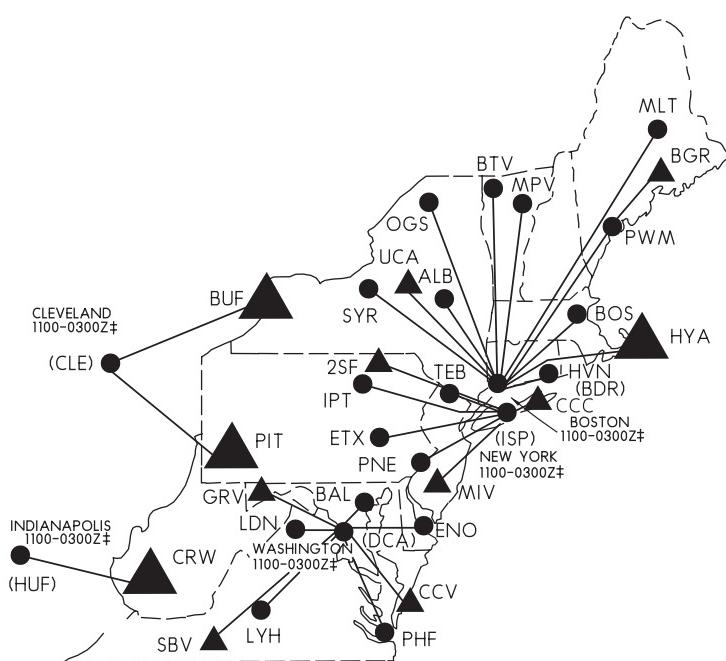
- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION/RADAR
- RADAR ONLY
- UAOS-BALLOON RELEASE AROUND 1100 UTC AND 2300 UTC DAILY
- OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE AND/OR EARLY AFTERNOON

NOTE: FOR RELEASES LATER THAN 1130 UTC AND 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE WILL BE FILED.



ENROUTE FLIGHT ADVISORY SERVICE (EFAS)

See Aeronautical Information Manual (AIM) for available services



BOSTON EFAS HIGH ALTITUDE FREQUENCY 133.925

ATLANTA EFAS HIGH ALTITUDE FREQUENCY 135.475

CLEVELAND EFAS HIGH ALTITUDE FREQUENCY 135.425

INDIANAPOLIS EFAS HIGH ALTITUDE FREQUENCY 134.825

WASHINGTON EFAS HIGH ALTITUDE FREQUENCY 134.525

NEW YORK EFAS HIGH ALTITUDE FREQUENCY 134.725

- LOW ALTITUDE COMMUNICATIONS OUTLET (122.0)

- ▲ HIGH ALTITUDE COMMUNICATIONS OUTLET

- ▲ BOTH LOW AND HIGH ALTITUDE COMMUNICATIONS OUTLET

